

SECTOR: IT-ITes

NSQF Level 4 (CLASS XII)

Student Workbook – Vol. 1

PSS Central Institute of Vocational Education, Bhopal

(a constituent unit of NCERT, under Ministry of Human Resource Development, Government of India)

Student Details

Student Name:_____

Student Roll Number:_____

Batch Start Date:_____

PREFACE

The National Curriculum Framework, 2005, recommends that children's life at school must be linked to their life outside the school. This principle makes a departure from the legacy of bookish learning which continues to shape our system and causes a gap between the school, home, community and the workplace.

The student workbook Volume 1 on "Functional English (Advanced)" is a part of the qualification package developed for the implementation of National Vocational Education Qualification Framework (NVEQF), an initiative of Ministry of Human Resource Development (MHRD), Government of India to set common principles and guidelines for a nationally recognized qualification system covering Schools, Vocational Education and Training Institutions, Technical Education Institutions, Colleges and Universities. It is envisaged that the NVEQF will promote transparency of qualifications, cross-sectoral learning, student-centered learning and facilitate learner's mobility between different qualifications, thus encouraging lifelong learning.

This student workbook, which forms a part of vocational qualification package for students who have passed Class X or equivalent examination, was created by a group of experts. The IT-ITeS Skill Development Council approved by the National Skill Development Corporation (NSDC) for the IT/ITES Industry developed the National Occupation Standards (NOS). The National Occupation Standards are a set of competency standards and guidelines endorsed by the representatives of IT Industry for recognizing and assessing skills and knowledge needed to perform effectively in the workplace.

The Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), a constituent of National Council of Educational Research and Training (NCERT) in association with Wadhwani Foundation has developed modular curricula and learning materials (Units) for the vocational qualification package in IT/ITES sector for NVEQ levels 1 to 4; level 1 is equivalent to Class IX. Based on NOS, occupation related core competencies (knowledge, skills, and abilities) were identified for development of curricula and learning modules (Units).

This student workbook attempts to discourage rote learning and to bring about necessary flexibility in offering of courses, necessary for breaking the sharp boundaries between different subject areas. The workbook attempts to enhance these endeavors by giving higher priority and space to opportunities for contemplation and wondering, discussion in small groups and activities requiring hands-on-experience. We hope these measures will take ussignificantly further in the direction of a child-centered system of education

outlined in the National Policy of Education (1986). The success of this effort depends on the steps that school Principals and Teachers will take to encourage children to reflect their own learning and to pursue imaginative and on-the-job activities and questions.

Participation of learners in skill development exercises and inculcation of values and creativity is possible if we involve children as participants in learning, and not as receiver of information. These aims imply considerable change in school routines and mode of functioning. Flexibility in the daily time-table would be a necessity to maintain the rigor in implementing the activities and the required number of teaching days will have to be increased for teaching and training.

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FUNCTIONAL ENGLISH (ADVANCED)

SESSION 1: CUSTOMER SERVICE REPRESENTATIVES

RELEVANT KNOWLEDGE

Who is acustomer service representative?

A customer service representative forms a link between businesses and customers, providing customer service support, answering general questions, offering technical support over the phone or via internet-chat.

- Customer service representatives are more popularly known as “CSRs”.
- CSRs may be direct representatives (store executives) or calling agents (call center) of their businesses.
- They communicate with customers to provide information in response to inquiries about products and services, and to handle and solve customer complaints. They form a very important link between businesses and the customers; they are often a company's main source of constant customer contact.
- CSRs, as call center agents, may also provide customer service support by offering technical and non-technical support over the phone or via internet-chat or answer general questions.
- They might handle bank or credit card account inquiries, customer requests, customer complaints, technical or non-technical support issues, customer suggestions and feedback.

Now, in your own words, describe the job profile of a customer service representative. Write your answer in your notebooks.

For any job profile, specific skills are required. What skills do you think customer service representative needs?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

Some of the skills required to be a good customer service representative are:

- **Communication:**Customer service representatives often handle client concerns by phone, so it's important they be skilled talkers. They must also be good listeners, and should be able to write brief and clear emails and letters.

- **Problem Solving:** Often, customer service representatives must identify problems, handle complaints or answer complicated questions. This makes it very important for them to be skilled in quick, logical problem solving.
- **Computer Skills:** The majority of customer service representatives use computers use computers on a daily basis, to recover client or company information. Therefore, they must be comfortable using computers and be able to learn and use different types of software and the Internet.
- **People Skills:** Customers are often upset when they contact customer service. This makes it very important that the customer service representatives are able to remain calm, polite and respectful at all times.
- **Grammar and Spelling:**Customer service representatives should speak proper English and be able to avoid slang. When writing emails or letters, they must practice good grammar and spelling.

EXERCISE 1 : Customer Service Representatives

Follow the instructions of your facilitator. In this exercise, you should be able to fill in the blanks to correctly describe and understand the job of a customer service representative, in a call center scenario and a face-to-face interaction.

1. A: Hi! How did your interview go?
   B: Good. They said I had the skills of a good CSR.
   A: CSR? What's that?
   B: It's the shorter version of a _____.
   A: Oh, that's good to know. So, what is the job of a CSR?
   B: Well, as they deal with customers on a daily basis, they form a very important _____ between the businesses and the customers. And because they handle complaints and sometimes answer complicated questions, they also need to be skilled in quick, logical _____.
   A: Sounds interesting. I hope you get the job.
   B: Me too.
   A: Good luck!
   B: Thanks!

2. A: Hey, Do you think I too could apply for a job as a CSR?
   B: Sure! In fact, you would be perfect for the job.
   A: What makes you think so?
   B: Because you have the all the skills required for the job.
   A: What are the skills needed?
   B: The first skill needed is _____, as you will have to either talk or email chat with customers the whole day. The next skill needed is

_____, as it's very important to be calm, polite and respectful at all times when dealing with customers. The other skills required are two things you are excellent at!
A: What?
B: Computers and _____. Computers, as CSRs use computers on a daily basis, to take down and recover client or company information, and they are required to speak and write/type letters/mails in clear and understandable English.
A: Great! I think I will apply for the job first thing tomorrow morning. Wish me luck.
B: Best of luck!

3. A: Did you check out the new website "This is IT.com" for IT/ITES jobs?
   B: No. Is it any good?
   A: Yes, it is. My friend just got a job through the site.
   B: So, do you know of any job offers that I could apply for?
   A: Yes. There is an opening for a customer service representative in a BPO. You should apply.
   B: What would my job as a customer service representative be like?
   A: I think you might have to provide customer service support by offering _____ and _____ support over the phone or via internet-chat or answer general questions. And you also may have to handle _____ or _____ card account inquiries, customer requests, customer _____.
   B: Wow! That seems like a lot to do. Do you really think I should apply?
   A: Yes. I do.
   B: Alright. I will go online and apply for the job right away!
   A: All the best!
   B: Thanks!

EXERCISE2 : Present Perfect Tense

Identify the sentences in the present perfect tense.

1. More stores **have** realized the importance of good customer service. X
2. APPLE **has introduced** the iPad-4 recently. √
3. Compworld**has** a new computer gaming section. X
4. Customers **have decided** to shop only at Compworld because of the wide range of computers they sell.√
5. They **have reduced** the prices of their laptops to half. √
6. More customers **are coming** to the shop after the sale was announced. X

Try and make simple sentences using this grammar concept.

Go through the assessment. If time permits, you can try to attempt it in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Read this:**

1. I _____ (*buy*) a modem.
   I **havebought** a modem.
2. I _____ not _____ (*buy*) a CD.
   I **have** not **bought** a CD.

Fill in the blanks with present perfect form of the verbs given in the brackets.

1. By mistake I _____ (*keep*) these old DVDs.
2. I just bought the laptop for 50,000 rupees and yet you_____ not _____(*give*) me any discount.
3. We are in loss because he _____ (*sell*) the laptop at a price lower than the cost price.
4. Trust me ma'am, I _____ (*offer*) you the best price. No other shop will offer you this price.
5. Someone_____ (*forget*) their wallet here.
6. He _____ (*sell*) very few computers because the customers find the prices very high.
7. I _____ (*spend*) less money for this computer than I thought I would because the shopkeeper gave me a good discount.
8. How many calls _____ you _____ (*make*) to the customers?
9. You _____ not _____ (*tell*) me the cost of the Tablet PC.
10. You _____ already _____ (serve) the customer well.

SESSION 2: DESCRIBING YOUR JOB

RELEVANT KNOWLEDGE

In the last session, you discussed the job profile of a customer service representative. In this session, you will learn how to give a simple job description.

Imagine that you have the job that you always wanted and your family is eager to know all the details. Now, answer the following questions.

1. What do you do?
2. Where do you work?
3. Where is your office located?
4. How long have you been working there?
5. What are your work timings?

Write your answers in your notebooks. The answers that you have just written constitute(i.e. form) a simple description of your job.

EXERCISE 1: Describing Your Job

Read the passage given below. It discusses Manish's job. Now, imagine that you are Manish (stand in Manish's boots) and answer the questions in the conversation that follows. Post that, you will form pairs and role play the conversation between A and B, and present the role play before the class.

Sahil works for a call center called "Contact-One". He is a customer service representative. His job requires him to answer all in-coming calls from customers and help them solve their issues. The office he works at is located in Gurgaon. He works from 14.30hrs (2:30pm) in the afternoon to 23.30hrs (11:30pm) in the night. He has been working on the same job for a little more than 2 years.

Sahil had worked as a customer service executive at a lifestyle-store before, but he likes this job better. That is because Contact-One is a huge organization and working there has helped him develop and expand his skills. He is also happy with the salary and benefits he receives. Sahil gets a salary of Rs 12,000 per month, and medical insurance covering him and his parents. He also receives an additional bonus of Rs 500 every week, if he solves more than 90% of his customers' issues, which he does! The only problem that he has with his job is the long distance from his home to the office, and the time it takes to travel back and forth.

A: So, where are you working at?
B: _____.
A: Where is it located?
B: _____.

A: Whatare the working hours?
B: _____.
A: How long have you been working on this job?
B: _____.
A: Tell us a little about your work.
B: I am working as a _____. The job requires _____.
A: Have you worked as a sales representative before?
B: _____.
A: How is this job different from your previous job?
B: _____.
A: How much does your job pay you?
B: _____.
A: What else is there?
B: _____.
A: So, is there anything that you do not like about your job?
B: _____
_____.

EXERCISE 2: Connectors and Conjunctions

Choose the appropriate conjunction / connector.

1. My main job is that of a Team Leader, _____ I also answer calls sometimes. (but, yet, so)
2. I chose to take up the job in Delhi _____ it is a bigger organization. (so, as, and)
3. My working hours are from 9am to 7pm; _____ you could say that I work 10 hours. (but, so, because)
4. I am doing an MBA _____ I want to grow in my career. (and, though, because)
5. In the near future, I want to become a Call Center Manager. _____ I have not worked in a managerial role before, I am sure I will pick up the skills. (Though, For, But)
6. First, I used to be a call center agent. _____ I became a Team Leader. (However, Then, In brief)
7. I like my new job. _____ I love talking on the phone! (Nevertheless, Moreover, Therefore)

Try and make simple sentences using this grammar concept.

Go through the assessment. If time permits, you can try to attempt it in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Read this:**

1. I told her I didn't know how to make an omelette, **so** she offered to show me how. (conjunction)
2. I told her I didn't know how to make an omelette. **Then** she offered to show me how. (connector)
3. She offered to show me how to make omelette**as** I didn't know how. (conjunction)
4. I didn't know how to make an omelette. **Therefore** she offered to teach me. (connector)

⊙**Instruction:** Fill in the blanks with connectors/conjunctions given in the box below. Some of the connectors/conjunctions can be used more than once.

though	however	and	but	as
then	because	so	next	thus

My name is Isha _____ I am a call center agent at WKS, a BPO at Tech-City in Gurgaon. I have been working there for more than a year. _____ I enjoy my work so much that time seems to have passed very quickly.

_____, a lot of people feel that a call center agent's job is easy, it's not. It is a job that requires a lot of energy _____ patience. Every morning, I have to reach the office by 9:00am sharp. _____ I have to mark my attendance, _____ make sure I check all my emails for any incomplete work that has to be completed. _____, I have to attend and solve all the customers' calls.

I start attending to calls at around 9:30am, _____, break for lunch only at 12:30pm. We have an hour to finish eating, and _____ its back to work.
_____ our organization is very large ____ internationally well known, it attracts a lot of customers from across the world.

SESSION 3: APPLYING FOR LEAVE

RELEVANT KNOWLEDGE

In this session, you will learn about how to apply for leave in a formal working environment. You will learn about different formats used to create leave applications.

What is a leave application?
An application for leave is a common employment email / letter written / typed in all organizations. Some points in common about all leave applications are:

- An employee should make it a point to draft a leave application before going on long leave. This helps the management in handing-over responsibilities to another employee, for the specified duration.
- The application emails / letters help in maintaining the leave record of the employee.
- The application is written to inform the superior about the employee's non-availability in the organization for a specific period.
- The letter is written in formal language and format specified by the organization.
- The reason of leave and period of absence is clearly specified in the letter.
- The application email / letter is short and precise.
- Only relevant information features in the letter / mail.
- The application should convey an assurance to the employer that all the pending work will be completed once the employee returns from leave.

The two samples below are for employees who choose to write an application in hard copy. Note the format and the language.Notice how the employee is applying a leave for a period of five days for a genuine personal reason.

A Sample Employee Leave Application letter – 1

Name: RaashiDingra
Employee Code: CSD - 1248
Date: 05/24/2013
To,
Avinash Bagaadi
Manager, Human Resources

Subject: Leave Application for 10 days for exams

Dear Sir,
I wish to apply for 10 working days leave from the 15th of next month till the end of month (16 - 27 Apr. 2012).

The reason for this is my master's course examinations of the final term. The examinations consist of the 10 papers that I need to appear for, and the additional five days are for preparing for the examinations.
I shall report back to work on the 30th of May 2012 and put in extra hours to complete any work that has arisen during the period of my absence.
I request you to kindly approve my leave.

Thanking you.

Regards,
Ankita Pandey

A Sample Employee Leave Application letter - 2
Dated: 21st July, 2009

To,
The Manager,
Computer Services Department.

Subject: Request for leave
Dear Sir/Ma'am,
I would like to request a leave for 5 days, from the 25th to the 29th of July, as I have to attend my brother's wedding in Jamshedpur. I assure you that the reports expected on 31st of July will be delivered on time.
I would be extremely happy if my leave is sanctioned.
Thanking you,

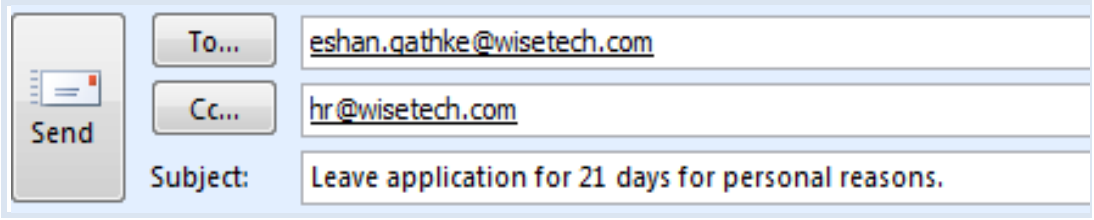
Regards,
Arun Anand - (Employee-Id No. 0123)
Computer Services Department

Note the format of the applications. Did you notice the details below?

- The date is written on the top left corner.
- The date is followed by the designation of the addressee. This is written on the left.
- The designation of the addressee is followed by the subject.
- The subject is followed by the salutation.
- The salutation is followed by the body of the later.
- The body of the letter is followed by the leave-taking.

Sample-3: Application of leavevia e-mail.
Note the format and the language.

. A Sample Employee Leave Application E-mail - 3



Dear Sir,
This application mail is to request you to grant me a leave of absence for three weeks starting from November 10, 2012.
My wife has had an accident resulting in a dislocated knee joint that needs to be surgically operated and I am the prime care taker. I need to be with her during the surgery and the recovery period. The doctors have advised her three weeks of complete bed rest.
Therefore, I would really appreciate your approval of leave, as I will have to take care of my wife, children and home. I will return to work on December 2, 2012.
All my work has been completed up-to-date; however, if there are any concerns, I can be contacted via phone / internet.
Yours sincerely
Jagjit Anand
Customer Service Representative
Employee - id 78910

Do you notice the difference in the format of a leave application via e-mail?
In an e-mail, the format all sections within the letter are aligned to the left. The paragraphs too should start from the left. All sentences too, should start from the margin of the letter or mail.

For example:
To: (recipient's address)
CC: (the reporting manager's personnel's e-mail addresses)
Subject: Leave application for ____ days for ____.
In this section, you may or may not mention the reason of the leave in the subject line itself. For instance, if it is for personal reasons, it is better not to write it in the subject line. In case it is for some general reason, such as an examination, then you may.
Body of the e-mail:

- Start with the addressee's name, designation, department, etc. In the first line, i.e. the introduction of the e-mail, one is supposed to write that he or she wishes to apply for leaves.
- Next, follows the date and number of working days.
- In the second paragraph, one can cite the reason for applying for leaves. Then request them to accept and approve the leave.

- The content of this letter should not exceed more than 300 words in general.
- End the letter by thanking the recipient and saying that you will await the reply.

Signature: Your name, designation, employee id, department

EXERCISE 1: Writing a Leave Application

Listen carefully to the instructions given by your facilitator. You need to form pairs and prepare a presentation as directed in the exercise. Each pair has to enact the completed conversation in the form of a role-play where one student plays the role of the A and B.

Fill in the blanks with the options given below:

- your reasons for taking the leave
- The letter should start
- you can write down the salutation
- Thanks a lot
- the top left corner
- you can write the body of your leave application
- write the subject after that
- designation of the person

A: I don't know how to write a leave application.
B: I do. Would you like me to teach you?
A: Yes, that will be great!
B: Okay. _____with the date. Write down the date on _____.
A: Okay. What should I write after date?
B: The _____you are writing the leave application to.
A: Right! And I suppose we have to _____.
B: Correct! After that, _____.
A: And the salutation is usually followed by the subject, isn't it?
B: Yes. Then, _____.
A: What should I write in that?
B: You can state how many days' leave you want to request as well as_____ _____.
A: Okay. And what comes after the body?
B: After the body of the letter, you can give the leave-taking. And that's how you write a leave application.
A: _____!

EXERCISE 2: Vocabulary

Choose the option which define the words in bold or share meaning with them.

1. A leave letter is one where you **request** leave.
    (a) ask for
    (b) demand
    (c) refuse
2. It should have a **subject**.
    (a) a statement which shortens the letter
    (b) a statement which states the topic of the letter
    (c) a statement which is an example of the letter
3. It is **easy** to write a leave application.
    (a) difficult
    (b) a tough job
    (c) not difficult
4. I would be extremely happy if my leave is **sanctioned**.
    (a) refused
    (b) allowed
    (c) not allowed
5. I have to **attend** my brother's meeting in Jamshedpur.
    (a) to be present at
    (b) to be absent at
    (c) to not go to

Go through the assessment. If time permits, you can try to attempt it in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Instruction:** Select the right word from the options given.

1. I would like to **request/beg** you for a grant of **motherhood/maternity** leave.
2. I have been working with this organization for the past six years and my leave record is **very good/perfect**.
3. Apart from last year when I **exhausted/finished** all my available leaves, every other year has at least 5 or 6 days of un-availed leaves.
4. I **understand/know** that the company does not provide maternity **leave/off**.
5. **However/Though**, I hope that my case can be considered as an **exception/omission** to the rule.
6. I hope this record helps you to view my case **favorably/happily**.
7. I would be extremely grateful if my leave is **sanctioned/passed**.

SESSION 4: BEING A GOOD TEAM PLAYER

RELEVANT KNOWLEDGE

All of us have worked in teams. A family too, is a team where each one of us cooperates with the others to make the journey smooth. The same holds true in organizations too. Now, look at the following situations and note down which characterizes the quality of being a good team player and which does not.

1. Your colleague asks you to look after his department for a while because he has to attend an urgent call. You refuse him by saying that you are too busy.
2. Your junior asks you to explain what to do as he is new. You describe the job in detail and tell him to come to you if he needs any help.
3. Your boss tells you to complete the call reports for the last two weeks with the help of two other customer service representatives; you tell your boss that you like to do things alone.
4. Your colleague asks you to help her with her calculations for the report. You willingly calculate her numbers and offer to complete the report for her.

Listen carefully to the instructions given by your facilitator and participate in the class discussion.

EXERCISE 1: Team Player 1

What would you do in order to be a good team player in the following situations?.

1. A colleague of yours wants your help in completing a project. You say:
(a) I am busy; however, I suppose I could help you a little.
(b) I am busy and I can't help you at all.
2. A colleague of yours wants your help in getting the information for the weekly call report. You say:
(a) I am busy so I can't help.
(b) I really wish I could help you; however, I have a lot of work to finish.
3. You and your colleagues are given the same task. You say:
(a) I think we can work together on the task as a team.
(b) You do the work your own way.

EXERCISE2: Team Player 2

Rearrange the following in order to complete the conversation between A and B.

- Maybe we could do it together.
- We will need the call reports, follow-up documents, as well as, all the on-site service reports we have.

o Oh! Even I have been given the same assignment.
o Okay. Shall I get the call reports?
o Yes, we could. Let's make a list of the things we might need.

A: Hello, I have been asked to categorize all the customer files according to the issues.
B: _____
A: _____
B: _____
A: _____
B: _____
A: Yes. I will go and get the follow-up documents, and the on-site service reports.

Listen carefully to your facilitator follow the instructions to complete the exercise.

EXERCISE3: Pronouns

Choose the appropriate pronoun for the following:

1. He told me to do the job _____. (mine, myself, me)
2. I needed _____ help. (your, yours, you)
3. If we do the work together, it will take _____ less time to complete it. (we, our, us)
4. I told them we can't do it without _____ co-operation. (theirs, their, them)
5. Working as a team helps _____ do our work faster and better. (we, us, ourselves)
6. Would you like _____ to help you? (me, I, myself)
7. He can do the work _____ but if we help him, it will be done faster. (him, himself, his)

Go through the assessment. If time permits, you can try to attempt it in class. Otherwise, you can attempt it at home and bring to the class the next day for review

ASSESSMENT

⊙**Read this:**

1. **We** need to fight for **our** rights.
2. **They** should do the work **themselves**.
3. **I** have to learn it on **my** own.
4. This is **my** struggle and **mine** alone.

⊙**Instruction:** Fill in the blanks with the correct pronouns.

1. My boss is a very intelligent and friendly person. _____ (*His* / *He*) guidance and support help _____ (*ourselves* / *us)* do our work efficiently.
2. When I joined the electronic department I didn't know how to service a DVD player. But Kaushik, who is very kind and helpful in nature, explained all _____ (*it* / *its*) know-how to me.
3. Shalini seemed unfriendly at first, but once I become a friend of _____ (*hers* / *her)*, she helped _____ (*I* / *me*) a lot and made me feel comfortable in the new office.
4. Naman and _____ (*I* / *me*) have never been that close, yet when I asked _____ (*him* / *he*)to help with categorizing the products according to their Brands, he readily agreed.
5. Anshuman had to leave for home early as his sister was not well. My boss not only gave _____ (*him* / *his*) permission to leave early, but also asked _____ (*he* / *his*) driver to drop Anshuman home.
6. Vandana has exchanged _____ (*hers* / *her*) day shift with Nisha's night shift because Nisha had to go to her son's school on Monday morning.

REVIEW SESSION 1

RELEVANT KNOWLEDGE

Objective: To evaluate your knowledge and understanding of Sessions 1, 2, 3 and 4 of Level-4.

Methodology: The review evaluations will be **Question and Answer** based. Answers will be assessed on content, context, grammar, sentence structure and vocabulary based on the sessions that have been imparted.

Process: The review evaluations will be divided into four parts. One for each session:

1. Customer Service Representatives.
2. Describing your job.
3. Applying for Leave.
4. Being a Good Team Player.

ASSESSMENT

Review of Session 1: Customer Service Representatives

Questions

Answer each question in this sectionas completely as possible, in your own words. "Parroted" answers are not expected. (i.e. ***do not*** *repeat the exact same words that were taught in the sessions).*

1. What are customer service representatives popularly known as?
2. What kind of a "link" do customer service representatives form between businesses and their customers, and why?
3. What is the job description of a customer service representative?
4. What the most important skills of a good customer service representative?

Grammar

Fill in the blanks of the given sentences with present perfect form of the verbs given in the brackets.

1. By mistake I _____ (*keep*) these old DVDs.
2. I just bought the laptop for 50,000 rupees and yet you_____ not _____(*give*) me any discount.
3. Trust me ma'am, I _____ (*offer*) you the best price. No other store will offer you this price.
4. Someone_____ (*forget*) their wallet here.

5. He _____ (*sell*) very few computers because the customers find the prices very high.
6. You _____ not _____ (*tell*) me the cost of the Tablet PC.
7. You _____ already _____ (*serve*) the customer well.

****

Review of Session 2: Describing Your Job

Questions

The details given below are of Tanuja Shah's job description. Rearrange the sentences of her job description, so it makes sense and has a sequential flow, and then answer the questions given below.

Sentences:

She works from 9.30am in the morning to 6:30pm in the evening. Her job requires her to attend to and serve all the customers' needs and queries, and assist them in the best way possible. She is a customer service representative at one of their stores. Tanuja works for a computer manufacturing giant called "Gadgetronics".

She has been working on the same job for a little more than 2 years. The office she works at is located in Gurgaon.

That is because Gadgetronics is a huge organization and working there has helped her develop and expand her skills. Tanuja gets a salary of Rs 9,500 per month, and medical insurance for her and her parents. Tanuja had worked as a customer service executive at a lifestyle-store before, but she likes this job better. She is also happy with the salary and benefits she receives. The only problem that she has with her job is the long distance from her home to the office, and the time it takes to travel back and forth. She also receives an additional bonus of Rs 750 every week, if she provides excellent service to more than 90% of her customers and receives good feedback, which Tanuja does!

Questions:

A: So, where are you working at?

B: _____.

A: Where is it located?

B: _____.

A: How are the working hours?

B: _____.

A: How long have you been working on this job?

B: _____.

A: Tell us a little about your work.

B: I am working as a _____. The job requires _____.

A: Have you worked as a sales representative before?

B: _____.

A: How is this job different from your previous job?

B: _____.

A: How much does your job pay you?

B: _____.

A: What else is there?

B: _____.

A: So, is there anything that you do not like about your job?

B:___._____.

Sentences

*Fill in the blanks with connectors/conjunctions given in the box above the given **sentences**. Some of the connectors / conjunctions can be used more than once.*

Connectors & Conjunctions:

though	however	and	but	as
then	because	so	next	thus

My name is Isha _____I work as a customer service representative at Gadgetronics at Tech-City in Chennai. I have been working there for more than a year now. _____I enjoy my work so much, I haven't noticed the months roll by.

_____,a lot of people feel that a customer service representatives job is easy, it's not. It is a job that requires a lot of energy _____patience. Every morning, I have to reach the office by 9:00am sharp. _____I have to mark my

attendance, _____make sure I check all my emails for any incomplete work that has to be completed. _____, I have to attend to all the customers' needs.

I start attending to customers at around 9:30am, _____,break for lunch only at 12:30pm. We have an hour to finish eating, and _____ it's back to work.

_____our organization is very large ____ internationally well known, it attracts a lot of customers from across the world.

****

Review of Session 3: Applying For Leave

Questions

Answer each question in this section as completely as possible, in your own words.

1) What do application emails/letters help maintain?
2) What kind of language and format must you use in an application email/letter?
3) What should be specified in the application email/letter?
4) Why is the application email/letter for leave written, and to whom?
5) "A leave application email/letter should consist of all kinds of information." - True/False? State why.
6) "The leave application email/letter should not be lengthy and imprecise." – True/False? State why.
7) "An employee shouldn't draft a leave application before going on long leave." – True/False? State why.
8) What do you need to always assure your employer of when applying for leave?
9) What is the format of a leave application letter? Explain step-by-step.

Letter Format

Rearrange the given points, to form a logical and coherent leave application letter based on the format taught in the session.

Leave Application Letter:

- Dear
- Computer Services Department
- The Manager,
- Thanking you,
- Dated: 21st July, 2009
- Sir/Ma'am,
- Regards,

- Computer Services Department
- Subject: Request for leave
- MitaaliSinghania - (Employee-Id No. 7890)
- I would be extremely happy if my leave is sanctioned. from the 25th to the 29th of July, as I have to attend my brother's wedding in Jamshedpur. I would like to request a leave for 5 days.

Sentences

Select the right word from the options given in bold in the givensentences.

1. I would like to **request / beg** you for a grant of **unwell/sick** leave.
2. I have been working with this organization for the past six years and my leave record is **very good/perfect**.
3. Apart from last year when I **exhausted / finished** all my available leaves, every other year has at least 5 or 6 days of un-availed leaves.
4. I **understand / know** that the company does not provide any paid **leave / off**.
5. **However / Though**, I hope that my case can be considered as an **exception** / **omission** to the rule.
6. I hope this record helps you to view my case **favorably / happily**.
7. I would be extremely grateful if my leave is **sanctioned / passed**.

****

Review of Session 4: Being a Good Team Player

Questions

Answer each question in the "Questions" section as completely as possible, in your own words.

- Which of the following characterizes the quality of being a good team player, and which do not?
    1. Your colleague asks you to help her prepare the report chart. You willingly help her and offer to complete preparing the chart for her.
    2. Your colleague asks you to help him with his report because he has to submit it today. You refuse him by saying that you are too busy.
    3. A new member of your team asks you to explain to him what the job involves. You describe the job in detail and tell him to come to you if he needs any help.
    4. Your boss tells you to complete the customer service reports for the last two weeks with the help of two other customer service representatives.; you tell your boss that you can't work with them, as you don't like them.

Role Play

Rearrange the following dialogues, in order to complete the conversation between A and B.

Good Team Player

- Maybe we could do it together.
- We will need the customer service reports, follow-up documents, as well as, all the on-site service reports we have.
- Oh! Even I have been given the same assignment.
- Okay. Shall I get the customer service reports?
- Yes, we could. Let's make a list of the things we might need.

A: Hello, I have been asked to categorize all the customer files according to the issues.

B: _____

A: _____

B: _____

A: _____

B: _____

A: Yes. I will go and get the follow-up documents, and the on-site service reports.

Sentences

*Fill in the blanks of the given **sentences** with the correct pronouns.*

1. My boss is a very intelligent and friendly person. _____ (His / He) guidance and support help _____ (ourselves / us) do our work efficiently.
2. When I joined the electronic department I didn't know how to service a DVD player. But Kaushik, who is very kind and helpful in nature, explained all _____ (*it* / *its*) know-how to me.
3. Shalini seemed unfriendly at first, but once I become a friend of _____ (*hers* / *her)*, she helped _____ (*I* / *me*) a lot and made me feel comfortable in the new office.
4. Naman and _____ (*I* / *me*) have never been that close, yet when I asked _____ (*him* / *he*)to help with categorizing the products according to their Brands, he readily agreed.
5. Anshuman had to leave for home early as his sister was not well. My boss not only gave _____ (*him* / *his*) permission to leave early, but also asked _____ (*he* / *his*) driver to drop Anshuman home.

6. Vandana has exchanged _____ (*hers* / *her*) day shift with Nisha's night shift because Nisha had to go to her son's school on Monday morning.

****

SESSION 5: TALKING ABOUT ONE'S COMPANY

RELEVANT KNOWLEDGE

At the end of this session, you should be able confidently describe your place of work. Read the following sentences given below about a company Safe-Keep.

Safe-Keep

- One of largest Software Companies in India.
- Provideshigh-end anti-virus and anti-hacking software.
- USP (Unique Selling Point)– software that keeps all individual personal data; bank accounts, personal information, all online details and passwords, etc. safe from theft; being hacked, and viruses.

Imagine that you work in this company and have to describe the company based on the points given above.

_____

_____

_____

_____

EXERCISE:1: Talking About One's Company 1

Use the given points given below to form a paragraph. Start with the line *"I work at Nokia."*

Nokia

- World's largest manufacturer of mobile devices
- Offers internet services which enable users to access music, games, media, messaging, and maps
- One of the most valuable global brands
- Mobile devices named according to series
- Series ranging from 1000 to 9000
- Special function series include Nokia Eseries (Enterprise series), Nokia Nseries (Multimedia Computer series), and Nokia N-Gage (Mobile gaming devices)

EXERCISE 2: Talking About One's Company 2

In this exercise you need to rearrange the sentences to form a conversation between a Customer and a Salesperson. Then you will form pairs and enact the conversation in a role play before the class.

- APPLE is the largest technology company in the worldthat designs, manufactures and sells consumer electronics, computer software, and personal computers.
- Of course! Our company invented the iPod!
- Thank you so much Ma'am. Please do visit us again.
- Ma'am, some of our best-known products are the Macintosh line of computers, the iPod, the iPhone and the iPad.
- No. That will be all.
- Ok. Does your company have any product that plays music only?
- Could you tell me a little about your company?
- Oh! That's great. What are your best known products?
- Really? I didn't know that.
- Alright, you've convinced me. APPLE it is! I'll buy the APPLE Laptop.
- Can you tell me what some of them are?
- Ma'am, would you like to purchase any software too?
- Do you make software too?
- Thank you. After all that you've told me about your company, I'm really happy I've bought an APPLE product.
- No. Not at this time. Right now, I only want to buy a good laptop for my son's birthday. He is studying animation.
- Then I think an APPLE Laptop would be perfect for your son Ma'am, as our products are mainly for professionals in the creative media and design fields.
- Our company produces some excellent software such as, iTunes, iLife, iWork, and many more.
- Very good! Is there anything else I can help you with Ma'am?
- Alright Ma'am, I'll make your bill right away.

The conversation should start with:
Customer: Could you tell me a little about your company?

EXERCISE 3: Pronouns

Read out the sentences below and choose the correct pronouns.

1. _____ was asked to talk about ____ company. (she-her, her-she)
2. I will let the company's success speak for _____. (myself, itself)
3. _____ Company lets _____, the employees, take initiatives. (our-we, our-us)
4. _____ Company employs fewer workers than _____. (my-yours, yours-mine)
5. _____ Company employs more workers than _____ does. (yours-my, your-mine)

6. At _____ company, _____ do not have to bring _____ own food. (our-we-our, our-us-our, our-we-ours)
7. Cooks are employed to prepare lunch for _____. (ours, us, ourselves)
8. But those who do not like the food prepared by _____, can bring food from home. (them, they, their)

Try and make simple sentences using pronouns.Go through the assessment. If time permits, you can attempt the exercise in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Read this:**

This, these, that, and *those* – These pronouns distinguish particular objects and people.
Anyone, anybody, somebody, someone, everyone, each, either, neither, everything, everyone, something, nothing, nobody, both, few, fewer, many, others, several, all, any, more, most, none, some, and *such* – These pronouns refer to one or more unspecified things or people.

⊙**Instruction:** Fill in the blanks by choosing the correct pronoun.

I work at SellWell, _____ (who, which) is a huge supermarket. It is situated in Anand Vihar. Myjob there is that of a sales representative. _____(Our, Ours) company is the largest supermarket chain in India. It has been around for more than five years. The items that wesell in _____ (this, these) huge supermarket are many. _____ (They, Their)include food, clothing, accessories, utilities, kitchen items, stationery, books – the list goes on. In fact, our slogan is "A shop for_____." (everyone, each)

Although we do great business every day, the one time when we get over a thousand customers a day is during the "Sale Season". For_____(me, mine), it is also the time to earn a lot of incentive. Customers pour in by hundreds and we have to help _____ (them, they)with _____ (their, theirs)shopping.

Each customer gives the sales representative helping them a token; the more tokens you get, the higher _____ (your, yours)incentive. The person who gets the highest incentive is awarded the "Best Sales Rep" title. It was given to _____ (me, myself) last year.

SESSION 6: INFORMATION TECHNOLOGY

RELEVANT KNOWLEDGE

Have you thought - What does the term IT mean?
"The full form of IT is Information technology. It is a branch of engineering dealing with the use of computers and telecommunications equipment to store, recover, transmit and control data."

Information technology is information that is processed, communicated, displayed and recovered in a fast, error-free and proper-way. Today's world is the world of information and telecommunication. All this has been possible through information technology like telephone, fax, telex, computers, internet, e-mail, photocopier, printer, scanner, cellular phones, pagers, videophone, televisions, digital camera, multimedia, etc. We can find IT everywhere around us. In fact the modern world will be incomplete without Information Technology and its various uses. It's almost impossible to even imagine the modern facilities without the use of IT. Every day new technology and inventions are being made in the area of information, processing and travelling, agriculture, health, education, etc.

In the field of agriculture, farmers use IT to start harvesting with the help of a "digital moisture meter" that records the wetness in the soil. For people suffering from hearing loss, "digits technology" helps process sounds that reduce noise, improves clarity of speech and controls unwanted loudness. In supermarkets IT helps for faster processing of bills.

Things that were once done manually or by hand have now become easier and faster due to the arrival of a computing technology. Our world today has changed a great deal with the help of IT which has entered almost every part of our daily lives, from homes to businesses. IT has become a part and parcel of our daily lives through the use of PC's, Internet, cell phones, faxes, etc. It is transforming lifestyles and habits of people all over the world. Any information can be exchanged by people in few seconds and that, too, in a proper and effective way without any loss of data while it is being processed.

The wonders of satellite phones, internet phones, text messages and e-mails, have opened up many opportunities for direct communication. Due to this, the whole world has become a smaller place today. The breakdown of geographical boundaries has made the world a 'global village'.

The use of IT has increased by leaps and bounds worldwide. Internet and multimedia have now become playthings for children. Our surroundings are proof enough to see how Information Technology has entered itself into our

everyday lives. Shopping, banking, travelling, education, entertainment, public sector, private sector, almost everywhere IT is playing its various roles very smoothly.

One of the biggest advantages of IT has been the creation of a whole new field of opportunities for skilled people leading to new and interesting jobs such as hardware and software developers, computer programmers, web designers, system analysts, etc.

The Indian Institutes of Information Technology are being set up at various places in the country. The government of India is very keen to achieve a great deal in the field of Information Technology. Now we can hope that India will become an IT superpower in the near future. There are many next generation modern and developing fields of Information Technology. Let us hope that these newer developments can provide benefits to our future generations, just as it has greatly benefited ours.

"Without Information Technology, Modern life will be the same as a car without fuel."

Read the above section and write down the main points in your notebooks.

EXERCISE 1: Information Technology

Complete the conversation between A and B with the help of inputs from the comprehension section of this session.

A: What is the book you're reading?
B: It's on Information technology. It's called "This is IT!" Have you read it?
A: Yes. It was very informative. Before reading the book, I never knew that IT is a branch of _____ dealing with the use of computers and telecommunications equipment to _____, _____, _____ and _____ data.
B: Exactly! IT's so interesting to find out that Information technology is just information that is processed, _____, displayed and _____ in a fast, error-free and proper-way.
A: Today, we can find IT everywhere around us. In fact the _____ world willbe incomplete without Information Technology and its various uses.
B: It's almost impossible to even imagine the modern facilities without the use of IT.
A: I agree. Every day new _____ and _____ are being made in the area of information, _____ and _____, agriculture, health, _____, etc.
B: Very true. In the field of agriculture, IT tells the farmers start harvesting

with the help of a “digital moisture meter” that _____ the wetness in thesoil.
A: Yes, and for people, who are suffering from hearing loss, “digits technology” is of great help. It processes sounds that _____ noise, _____ clarity of speech and _____ unwanted loudness.
B: And in super_____ it helps for _____ processing of bills.
A: It is amazing how things that were once done manually by hand, have now become so much easier and faster due to the arrival of _____ _ _____.
B: IT has entered almost every part of our daily lives, from _____ to _____.
A: Our surroundings are proof enough to see how Information Technology has entered itself into our everyday lives.
B: _____ping, _____, travelling, education, entertainment, public business sector, private business sector, almost everywhere IT is playing its various roles very smoothly.
A: Yes, it is transforming _____ and _____ of people all over the world.
B: Due to the wonders of satellite _____, _____ phones, text messages and e-mails, have opened up many opportunities for direct communication.
A: And because of that, the whole world has become a smaller place today.
B: Absolutely! The breakdown of geographical _____ has made the world a 'global _____'.
A: Let us just hope that the new developments in the fields of IT can provide benefits to our future _____, just as it has greatly benefited ours.

Listen carefully to the instructions of your facilitator and after you have completed the exercise, form pairs to present a role play where you enact the role of A and B each.

EXERCISE 2: Prepositions

Read aloud the sentences and choose the correct preposition:

1. Stack those CDs _____ the third shelf. (in, on, at)
2. The shelf where the cables are kept is next _____ the shelf where the disks are stacked. (to, from, beside)
3. Put those CPUs on the shelf _____ the one where you just placed the monitors. (below, under, underneath)
4. Keep the yellow folders separate _____ the blue ones. (with, against, from)
5. Then arrange the keyboards on the shelf _____ the one where the speakers are placed. (above, over, inside)
6. Place the manual _____ the table. (above, over, on)
7. Make sure the monitor screen is facing forward when you put it _____ display. (at, for, on)

8. Make sure the customers _____ are served too. (out, outside, over)
9. Make sure all products are placed _____ the right shelves. (on, in, at)
10. You can stack these parts are fixed _____ the help of the technology specialist. (by, with, from)
11. Our ever day lives have been made easier _____ Information Technology. (by, with, from)
12. The manual will tell you where _____ put each cable. (to, at, with)

Try to make simple sentences using prepositions. Go through the assessment. If time permits, you can try to attempt it in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Read this:**

1. Are you going **to** the office?
2. Are you going **to** the office **with** Ashish?
3. Are you going **to** the office **with** Ashish **in** his car?
4. Are you going **at** 5 or before that?

⊙**Instruction:** Fill in the blanks with appropriate prepositions.

1. Do not place heavy items _____ (*between* / *on*) the laptop. It is not strong enough to bear the weight.
2. The software designer lives _____ (*at* / *in*) the end of the street.
3. Remove the deleted items _____ (*in* / *from*) the recycle bin.
4. Always make sure that the logos of the computers are visible so that it's easy for the customers' _____ (*to* / *for*) recognize the brand names.
5. Do not place too many items _____ (*above* / *on*) the desktop. It slows down the computer.
6. Make sure that there is enough lighting _____ (*in* / *on*) the office. Put extra lights _____ (*over* / *upon*) the items that you want to draw attention to.
7. Customers' details should be filed and kept _____ (*into* / *inside*) a folder.
8. Be extra careful _____ (*while* / *during*) opening certain emails.
9. The game may be stored _____ (*under* / *in*) a folder.
10. Make sure there is enough space _____ (*among* / *between*) the two shelves for customers to walk around.

SESSION 7: THE ITES INDUSTRY

RELEVANT KNOWLEDGE

What does the term ITES mean?

ITES stands for **I**nformation **T**echnology-**E**nabled **S**ervices.

- This means services delivered over telecom networks (phone) or the Internet (e-mail or chat) to millions of customers of different companies across the world.
- In simple terms, **IT**-**E**nabled **S**ervices are functions performed in a country (example: India / China) different from the one where the final-service is delivered (United States of America or England); that is, delivered over telecommunication (phone or e-mail).
- ITES is supported by Information Technology (IT) in different fields like Banking, Insurance, Telecommunication, etc.
- ITES – Information Technology Enabled Services includes the Call center, BPO, KPO and RPO."

In the above bullets you have come across the terms "Call center", "BPO", "KPO" and "RPO". What are they?

Call Center: is a service center with good telecom facilities, trained consultants, access to the Internet and other online information and is set-up to provide information and support to a customer.
They are offices used for the purpose of receiving and transmitting a large volume of customer focused telephone calls that are handled by trained customer service representatives. The telephone calls may be "inbound" (customers call-in for getting information about a product) or "outbound" (customer service representatives call customers to sell some product or to provide information about some service).
A typical call center functions as follows:

- A customer uses a toll-free number (there is no cost when this number is dialed) that is connected to a customer support center.
- When a call reaches the call center, the customer is answered by a trained customer service representative, who has access to a wide database of information, and is trained on the product/service being offered.
- The technology created by the IT experts, to support the Call center, makes sure that the customer service representatives have the latest information available, thereby ensuring that the highest standards of customer service are delivered.
- With the increase in world-wide connectivity, it does not matter if the call center is located in the local city of the customer or anywhere else in the world.

BPO: is business process outsourcing when an organization outsources a part of its business (customer service; attending customer calls or sales calls) to another organization that is an expert in handling that kind of business. The two organizations can be in two entirely different parts of the world.

For example; Company-A in the USA, may sign an outsourcing customer-service contract with Company-B in India. The contract means that Company-B will be responsible for Company-A's Customers by

- Attending and communicating with all of Company-A's customers
- Handling all Company-A's customers' questions and complaints
- Making sure all of Company-A's customers are happy and satisfied with the services provided by Company-A and Company-B.
- Making certain that all of Company-A's customers stay loyal to Company-A's Brand.

Company-B will be responsible for Company-A's customer-service only till the time that is mentioned in the contract.

KPO: is Knowledge Process Outsourcing. It describes the outsourcing of core business activities, that are important and forms a primary part of a company's chain of activities. KPO services include all kinds of research and information gathering, e.g. intellectual property research for patent applications; equity research, business and market research, legal and medical services; training, consultancy, as well as, research and development in fields such as; pharmaceuticals and biotechnology, and animation and design.

RPO: Recruitment Process Outsourcing is a form of business process outsourcing (BPO) where an employer outsources or transfers all or part of its employment and staffing activities to an external service provider. The employment and staffing activities that are normally stated in the contract are; screening of candidates who have applied for jobs and the hiring of new employees. If mentioned in the contract, it may also include one, some or all of the following:

1. Deciding the position and salaries to be offered to new employees
2. Setting company guidelines, and
3. Ensuring all employees and department heads follow company guidelines.

Now, read aloud the following story:

Twenty-two-year-old Hrithik gets ready in haste, and rushes into the company cab to go to the I-Tech city. He works at AG - Gurgaon, a Call center for the American company Assurance Giant Inc.

A typical day for Hrithik begins at 7 p.m. (8 a.m. US time), as he begins calling the AG credit-card holders in faraway places like New York and Washington to remind them to pay their bills. "Hi. My name is Greg (his name is changed to Greg) and I'm calling from AG," he says in his friendliest voice. People answering Greg 's calls have no way of knowing that he is sitting in Gurgaon, or that his real name is Hrithik, and that he picked up the American accent by

attending a training class at AG, Gurgaon. AG, Gurgaon, is filled with such talented customer service representatives who make outgoing calls to the United States of America, and take incoming calls, bounced by satellite to India.

Most have never set foot in the United States, but they spend a large part of every day (or every night) answering customer enquiries, calling credit-card nonpayers, calculating medical claims, providing customer service, and doing such other activities. There are many international companies such as… computer giants; DELL, Microsoft, automobile manufacturer; Ford, and leading airline; British Airways, who are benefiting from the IT-enabled services being provided in India

Think - Why India? Why do so many American organizations choose to outsource their businesses to India? Write your answers here:

_____

_____

_____

_____

Some of the reasons are that our country offers many advantages as an IT-enabled services destination for major global companies:

- A 12 hour time difference with the USA
- Talented work force who can speak English fluently
- The cost of qualified employees is amongst the lowest in the world
- The support that the Government of India lends to all IT based industries

EXERCISE 1: The ITES Industry

Based on what you have understood about the ITES Industry, complete the conversation between Aman and Simrit, given below:

Aman: Simrit, I heard you've decided to join the ITES industry, is it true?
Simrit: Yes. It's a good offer from a very big company, and the job is very interesting too.
Aman: Well, good for you! Can you tell me what does ITES stand for?
Simrit: ITES stands for _____ _____ _____ _____.
Aman: Thanks for telling me. So, are you going to work for the ITES itself?
Simrit: No, silly! ITES means services delivered over _____ networks or the _____ to millions of customers of different companies across the world.

Aman: I'm still a little confused.
Simrit: Okay, let me explain it in simpler terms, ITES are _____ performed in a country (example: India / China) different from the one where the final-service is _____ (United States of America or England); that is, delivered over tele_____.
Aman: So do the computer experts also work for the ITES?
Simrit: Well, the ITES is supported by _____ _____ (IT).
Aman: So, what are the different businesses that are a part of the ITES?
Simrit: There are mainly four business units that are part of the ITES.
Aman: I think I know one, the ____ _____. Correct?
Simrit: Yes. You're right! The remaining three are the ___, the ___ and the ____.
Aman: What's the difference between all of them? Aren't they all business pro_____ _____ing units?
Simrit: Well, they are similar, and yet have very different functions.
Aman: How?
Simrit: Well, let's start with the ____ _____. They are offices used for the purpose of ____ing and transmitting a large volume of _____ focused _____ calls that are handled by trained _____ service _____.
Aman: What kind of calls?
Simrit: The calls may be "_____", meaning customers call-*in* for getting information about a product, or "_____", meaning calls are made *out*to customers to sell some product or to provide information about some service.
Aman: Is it true that the ___ _____ can be located in a different city or country from where the customer lives?
Simrit: Yes. The customer may be in a completely different part of the world!
Aman: Cool! So what about the ____? What are its functions?
Simrit: ____ is _____ pro_____ _____ing. That is, when an organization _____ a part of its business to another organization that is an _____ in handling that kind of business.
Aman: And can the two organizations be in two entirely different parts of the world?
Simrit: Yes. A company in the USA may sign an _____ing customer-service _____ with a company in India.
Aman: What does the Indian company have to do?
Simrit: The Indian company will be _____ for the American company's customer-service that is, taking care of all their customers, only till the time that is mentioned in the contract.
Aman: Sounds interesting. So what about the ____? How is that different from the above two?
Simrit: The ____ is known as _____ledge Pro____ _____ing. It describes the _____ing of core _____ activities, that are important and

forms a primary part of a company's chain of activities.
Aman: What kind of services do they provide?
Simrit: ____ services include all kinds of _____ and _____ gathering.
Aman: So it's all knowledge based?
Simrit: Yes.
Aman: Super! So, what about the ____? I've never heard about it before.
Simrit: ____ is Rec_____ Pro_____ Out_____ is when an employer ___sources or transfers all or part of its employment and staffing activities to an external service provider.
Aman: What are the employment and staffing activities?
Simrit: The employment and staffing activities that are normally stated in the contract are the _____ing of candidates who have _____ for jobs and the _____ of new employees.
Aman: Wow! Everything sounds very interesting. Thanks Simrit, for explaining it all to me.
Simrit: You're welcome! Aman, now it's your turn to explain something to me.
Aman: What?
Simrit: Can you tell me why do American organizations choose to outsource their businesses to India?
Aman: I suppose because of a ___ hour time difference with the USA, and we have talented _____ force who can speak _____ fluently. Also because, the cost of _____ employees is amongst the _____ in the world, and the support that the _____ of India lends to all IT based industries.
Simrit: So true!

After completing the exercise, form pairs and enact the role of Aman and Simrit each.

EXERCISE 2: Shades of Meaning

Read aloud the following sentences and choose the correct option:

1. _____ you were deciding on which book to read, I bought a music Cd. (While, Meanwhile)
2. If you _____ to do your MBA, you will _____ a degree first. (want-require, require-want)
3. Put those computer _____ (packets, packs) in the "Electronics" section.
4. All phones should be checked before the customers _____ (start, commence) calling.
5. All Cds should be _____ (deposited, stored) in their covers.
6. Product _____ (arrangement, display) is a tricky task.

7. _____ (Show, Demonstrate), the customers around the store and _____ (assist, support) them in finding what they need.

Go through the assessment. If time permits, you can try to attempt it in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Instruction:** Fill in the blanks with the correct options.

1. You need to _____ (*follow* / *go after*) the guidelines of the company.
2. Make sure that the team works well _____ (jointly / together).
3. The pictures in the manuals need to be easy for the customers to understand, so that they can easily _____ (*identify* / *detect*) the parts of the computer.
4. _____ (*Extra* / *Further*) work should be appreciated.
5. Do not touch the computer monitor with _____ (*polluted* / *dirty*) hands.
6. Do not put more than the required number of items needed on your desk, or else it will look _____ (*messy* / *jumbled*).
7. Keep the floppy disks away from extreme heat, or else they will get _____ (*spoilt* / *destroyed*).
8. _____ (*Current* / *Fresh*) recruits should be informed of the company's guidelines.
9. I have always wanted to join the BPO _____ (*sector* / *portion*).
10. The new micro-computer is very _____ (*small* / *little*).

REVIEW SESSION 2

RELEVANT KNOWLEDGE

The purpose of this session is to evaluate your knowledge and understanding of Sessions 5, 6 and 7.

Methodology: The review evaluations will be **Question 'n' Answer /Role play** based. Answers will be assessed on content, context, grammar, sentence structure and vocabulary based on the sessions that were imparted.

Process: The review evaluations will be divided into three parts, one for each session:

- Talking about One's Company.'
- Information Technology.
- The ITeS Industry.

ASSESSMENT

Review of Session 5: Talking about one's Company

Listen carefully to your facilitator and complete the following details as per directions given.Rearrange the sentences to form a conversation between a Customer and a Customer Service Representative.

Role-Play:

- APPLE is the largest technology company in the world that designs, manufactures and sells consumer electronics, computer software, and personal computers.
- Of course! Our company invented the iPod!
- Thank you so much Ma'am. Please do visit us again.
- Ma'am, some of our best-known products are the Macintosh line of computers, the iPod, the iPhone and the iPad.
- No. That will be all.
- Ok. Does your company have any product that plays music only?
- Could you tell me a little about your company?
- Oh! That's great. What are your best known products?
- Really? I didn't know that.
- Alright, you've convinced me. APPLE it is! I'll buy the APPLE Laptop.
- Can you tell me what some of them are?
- Ma'am, would you like to purchase any software too?
- Do you make software too?
- Thank you. After all that you've told me about your company, I'm really happy I've bought an APPLE product.

- No. Not at this time. Right now, I only want to buy a good laptop for my son's birthday. He is studying animation.
- Then I think an APPLE Laptop would be perfect for your son Ma'am, as our products are mainly for professionals in the creative media and design fields.
- Our company produces some excellent software such as, iTunes, iLife, iWork, and many more.
- Very good! Is there anything else I can help you with Ma'am?
- Alright Ma'am, I'll make your bill right away.

Questions:

Answer each question in the "Questions" sectionas completely as possible, in your own words.

Scenario – I: Gadgetronics

1. *In Scenario-I, you work for Gadgetronics. Describe your company based on the points given below.*
   - One of largest Computer and Software Manufacturing Companies in India
   - Manufacture all types of Computers and high-end anti-virus softwares
   - USP – "Something for Everyone" their tag line. Costs that suits every budget and softwares that keeps all online data and passwords, safe from viruses.

Scenario – II: Nokia

2. *In Scenario-II, you work for Nokia. Describe your company based on the points given below.*
   - World's largest manufacturer of mobile devices
   - Offers internet services which enable users to access music, games, media, messaging, and maps
   - One of the most valuable global brands
   - Mobile devices named according to series
   - Series ranging from 1000 to 9000
   - Special function series include Nokia E-series (Enterprise series), Nokia N-series (Multimedia Computer series), and Nokia N-Gage (Mobile gaming devices)

Sentences:

In the sentences given below, fill in the blanks by choosing the correct pronoun.

1) I work at Gadgetronics, _____ (who, which) is a computer manufacturing giant. It is situated in Gurgaon. My job there is that of a customer service representative.

2) _____ (Our, Ours) company is the largest computer manufacturer in India. It has been around for more than five years.
3) The computers that we sell in _____ (our, we) stores are many. _____ (They, Their) include desktops, laptops, tablets, notebooks, etc.
4) In fact, our slogan is "Something for_____." (Everyone, Each)
5) Although we do great business every day, the one time when we get over a thousand customers a day is during the "Sale Season".
6) For_____ (me, mine), it is also the time to earn a lot of incentive. Customers pour in by hundreds and we have to help _____ (them, they) with _____ (their, theirs) shopping.
7) Each customer gives the customer service representative helping them a token; the more tokens you get, the higher _____ (your, yours) incentive.
8) And the person who gets the highest incentive is awarded the "Best Service Rep" title. It was given to _____ (me, I) last year.

****

Review of Session 6 :Information Technology

Listen carefully to your facilitator and complete the following details as per directions given.

Question:

Answer each question in the "Questions" sectionas completely as possible, in your own words.

1) What is Information Technology?
2) Where can we find Information Technology? Explain.
3) How has computer technology made things easier? Give an example.
4) Fill in the blanks with the correct option given: Every day new _____ (*technicians/technology*) and _____ (*things / inventions*) are being made in the area of information, processing and travelling, agriculture, health, education, etc.
5) How has our world today changed with the help of Information Technology?
6) How has Information Technology become a part of our daily lives?
7) What is one of the biggest advantages of Information Technology, in relation to jobs?
8) The government of India is not showing much interest in the field of information technology. True or False? Explain.
9) The Indian Institutes of Information Technology are being set up at various places in the country. True or False?

10) Today, Information takes a long time to be exchanged by people and that too, in an improper and ineffective way where loss of data may occur while it is being processed. True or False? State your reason.

Sentences:

In the sentences given below, fill in the blanks with appropriate prepositions.

1) Do not place the CDs _____ (between / on) top of the modem.
2) The Gadgetronics office is _____ (at / in) Gurgaon.
3) Do not place too many items _____ (above / on) the desktop. It slows down the computer.
4) Customers' details should be filed and kept _____ (into / inside) a folder.
5) Make sure that there is enough lighting _____ (in / on) the office. Put extra lights _____ (over / upon) the items that you want to draw attention to.
6) Delete all the infected files _____ (in / from) the computer.
7) Be very careful _____ (while / during) opening certain emails.
8) Companies usually make sure their logos are visible so that they're easy for customers' _____ (to / for) recognize their brand names.
9) Place the customer contact details _____ (under / in) the "customer info" label.
10) Computer technology is very popular _____ (among / between) the youth.

****

Review of Session 7: The ITES Industry

Listen carefully to your facilitator and complete the following details as per directions given.

Question:

Answer each question in the "Questions" sectionas completely as possible, in your own words.

1) What does ITES stand for?
2) When we say IT-Enabled "Services", what kind of services are we referring to?
3) What is ITES supported by?
4) Does the ITES Company and the customer need to be in the same country? If no, explain why.
5) What does ITES comprise of?
6) What is a Call center and its' functions? Explain in simple terms.

7) What does BPO stand for, and what is its main function? Give example of the kind of business.

Sentences:

In the sentences given below, fill in the blanks with the correct options.

1) The files that have been infected by the virus have all been _____ *(gone bad/ destroyed).*
2) We should _____ *(follow / go after)* what we want.
3) They need to do this project _____ *(jointly / together).*
4) Our logo has to be easy for the customers to _____ (*identify / detect)* our brand.
5) _____ *(Extra / Further)* progress should be made.
6) Science has _____ *(proved / improved)* over the years.
7) Do not put more than the required number of folders needed on your desktop, or else it will look _____ *(messy / jumbled).*
8) _____ *(Current / Fresh)* recruits should be informed of the company's guidelines.
9) I have always wanted to join the ITES _____ *(sector / portion).*
10) The new microchip from Intel is really very _____ *(small / tiny).*

****

SESSION 8: COMMUNICATING EFFECTIVELY

RELEVANT KNOWLEDGE

We have been communicating with other ever since we can remember. But then what do we mean by effective communication?

Read the passage below, aloud:

Whether you're speaking with a customer over the phone, via email or face-to-face, effective communication skills, proper grammar and active listening / reading skills, can make all the difference between satisfying a need and escalating a problem.
In fact, the same is true when communicating with anyone in a professional environment, whether you're applying for a job or talking to your boss about a promotion you want.
So though basic and simple, these skills are critical to achieving your professional goals, both today and in the future. Best of all, it's all right here at your fingertips. Just practice your pronunciation, enhance your listening and improve your grammar.

Now look at the following situation:

Your boss demands that you work an extra hour. But you always come to work on time and leave after you complete your shift. Plus, your house is quite far from your office and you have to take a bus.

How would you explain to the boss that you can't work the extra hour? Write your answer below.

_____

_____

EXERCISE 1: Communicating Effectively

Choose the response appropriate for each situation:

1. Your customer asks you to process his/her request while on the call. But you, as a CSR, have your own work to do.

(a) I am not going to process anything for you now. I am busy.
(b) I am sorry, Sir/Ma'am. I really wish I could do that right now, however, as a customer service rep, I have to process orders according to the call number of the customers.

2. Your boss gives you only ten minutes' lunch-break.

(a) Sir/Ma'am, could we have a longer lunch-break? Ten minutes is too short for

having lunch.
(b) No one can eat lunch in ten minutes.
(c) Could you give us a longer lunch-break?

3. Your customer does not want the cell-phone that has been delivered to her. She says it's not working properly.

(a) I am not going to replace the cell-phone. You bought it, so you have to keep it.
(b) I'm sorry Ma'am/Sir; however, as we have no return policy, I will be unable to replace the cell-phone. What I can do is, have one of our tech-experts take a look at it and replace any parts that may not be working properly. Will that be okay with you?

4. Your boss never sanctions your request for leave. You have an important family event to attend.

(a) I would like you to consider my request, Sir/Ma'am. I have an important family event to attend.
(b) I am asking because I have an important family event to attend. Now, are you allowing me to go or not?

5. Your colleague asks you to help him/her prepare the monthly service call report.

(a) I wish I could, however, I am sorry; I will not be able to assist you with the monthly report, as I have to complete all my assigned work by the same date.
(b) I am not going to help you. I have enough to do.

EXERCISE 2: Past Continuous Tense

Read aloud the following sentences and identify those that are in the past continuous tense.

1. I was talking to my boss.
2. He is a demanding person.
3. He was asking me if I could work this Saturday.
4. I refused him by saying that I have some urgent work.
5. Everyone has been complaining about him.
6. My colleagues were also telling me about their experiences.
7. We were thinking about writing a formal complaint.

Go through the assessment. If time permits, you can try to attempt the exercise in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Read this:**

1. She **was playing** with her dog.
2. The mob of people **was shouting**.
3. Zara, and not Meher, was **painting** the wall.

⊙**Instruction:** Change the verbs in bold to **past continuous tense**and rewrite the sentences.

1. My boss is looking for me.
2. He is going to complain about my performance again.
3. He plans to talk about why the store is getting less and less customers each day.
4. Fewer customers come because of lack of fresh stock.
5. But our boss blames us for this.
6. We have thought of having a talk with him.
7. We are going to tell him that we need to remove the old stocks and get fresh ones. Who wants to buy rotten potatoes, after all?!
8. We think that a meeting would be a better approach than talking individually.
9. We forced him to listen to our opinions on the subject.
10. He listened to his worker's suggestions for the first time in his life; our plan worked!

SESSION 9:OPENING AND CLOSING A CUSTOMER SERVICE CALL

RELEVANT KNOWLEDGE

Listen carefully to the instructions given by the facilitator and enact the role play as directed. At the end of this role play, you should be able to appreciate how to open and close a customer service call. Some of things good to know are:

When dealing with customers over the telephone, customer service representatives need to remember that, the call is a substitute for face-to-face conversations.
Over the phone, no one can see the other person (facial expression, their manners, reactions, or what the other person is doing), **but a lot can be judged from the tone of the voice!** The rules for dealing with a customer over a phone professionally are simple but they need to be continually practiced.
Read aloud the passages given below:

Opening the conversation:
There are the two basic ways of opening a call. These should always be employed.

1. Smile when you answer. This helps to make the customer feel welcome
2. Use friendly phrases as part of your greeting; "*Thanks for calling*", "*May I help you?*"
   Some polite opening statement examples:
   - Greet the customer
     - State the name of your organization
     - Introduce yourself
     - Offer your help

"*Good morning, Airway Travels, Harpreet Kaur speaking. How may I help?*"

- Thank the customer for calling your organization
  - Introduce yourself
  - Offer your help

"Thank you for calling Airway Travels, this is Harpreet Kaur. How may I *help?*"

Closing the conversation:
When customer service representatives finish their telephone conversation there are some polite statements that should always be made.

1. Ask the customer if their issue has been solved to their satisfaction.
2. Ask the customer if there is anything else they need any assistance or help with.
3. Thank the customer, once again, for calling your organization. This lets the customer know that their business has been appreciated
4. Re-introduce yourself.

5. Tell the customer it was a pleasure serving them.
6. Say good-bye and close call

For Example:

"Has your question been answered satisfactorily? Is there anything else I can help you with? Thank you for calling Airway Travels. This was Harpreet Kaur. If you have any additional questions please feel free to call us anytime. It was a pleasure serving you. Goodbye."

EXERCISE 1: How to Open and Close a Customer Service Call

Read aloud the details below. (Here CST stands for Customer Service Representative and Cust indicates Customer)

CSR: _____ for calling Airsell. This is Jaspreet. How _____ you?
CSR: May I please have your full name and phone number?
Cust: Ranjeev Singh. My phone number is 919922 2299.
CSR: If I understand you correctly, what you are saying is you would like a 'post-paid connection', am I correct?
Cust: Yes.
CSR: Very good Sir. I'd be very happy to tell you all about the different plans we have. May I have two minutes of your time now?
Cust: No, I don't have the time right now, but could you please mail me your different post-paid plans?
CSR: Sure. Would you please provide me with your email-id and I'll send you the details right away!
Cust: Great! My email-id is ranjeev.singh@email.com.
CSR: May I please confirm your email-id. It is ranjeev.singh@email.com, am I correct?
Cust: Yes.
CSR: Thank you Sir. Is _____ I can assist you with?
Cust: No. That's it.
CSR: _____ so much for _____ Airsell. This was Jaspreet. It's been a pleasure serving you. Goodbye!_____.

##########

CSR: Hello! Thank you for _____ Holiday Travels. ____ is Mandira _____. How may I help you?
Cust: My family and I want to go for a summer holiday, and we would like to know the best place to go to. Can you please tell me which place is best at this time of the year?
CSR: I can surely help you Ma'am. As there are many wonderful places to choose from, I can send you a mail with all the different choices and you can take your time and select what best suits your family.

Cust: Great!
CSR: May I please have your email-id Ma'am? So I can mail you the details right away!
Cust: It is seema.kapoor@yahoo.com.
CSR: Thank you Ma'am. Is there anything else I can help you with?
Cust: No.
CSR: Thank you for calling Holiday Travels. We really appreciate you calling us. This was Mandira. It's was a _____ assisting you.
_____!

Form pairs and do the exercise in your student handbooks. Fill in the blanks. After you have filled out the blanks, come forward by turns and enact the role of the CSR and the customer.

EXERCISE 2: Adjectives and Adverbs

Read aloud the following sentences and identify whether the words in bold are adjectives or adverbs.

1. **Good** Morning!
2. The customer service representative must always be **polite**.
3. A customer must be greeted **cheerfully**.
4. A **satisfied** customer will speak **highly** of the company.
5. Smile **warmly** while greeting customers.
6. Wish customers a **good** day when you end a call.
7. **Never** forget to thank customers for calling.

Try to make simple sentences using adjectives and adverbs. Go through the assessment. If time permits, you can try to attempt the exercise in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Read this:**

1. This issue should be solved **quickly**. (adverb)
2. You need to be **quick** while handling such issues. (adjective)
3. I am **sure** that the work will be completed. (adjective)
4. **Surely**,the work will be completed. (adverb)

⊙**Instruction**: Fill in the blanks with the correct adjective/adverb.

Delivering good customer service – sounds like an _____ (easy, easily)task. However, how you talk to your customers plays an important role.

A _____ (professional, professionally) _____ (friend, friendly)conversation will makes them feel welcome. Here are some examples of how you can talk to a customer _____ (warm, warmly):

1. Good morning! Thank you for calling ‘book-your-ticket.com’,
2. This is Karan Singh speaking.
3. How may I help? Or
4. Is there anything in _____ (particular, particularly) that I can help you with?
5. Has your question been answered satisfactorily?
6. Is there anything else I can help you with?
7. Thank you for calling ‘book-your-ticket.com’.
8. This was Karan Singhania.
9. If you have any additional questions please feel free to call us anytime.
10. It was a pleasure serving you.
11. Goodbye.

_____(Simple, Simply) sentences like these not just show manners; they _____ (actual, actually) let your customers know that help is available. However, just saying the words is not enough. Your voice plays an _____ (equal, equally)important role. Politeness and a friendly smile _____ (real, really) helps the customers feel comfortable. You also show them that your services are _____ (ready, readily)available,and you will do all that you can to make sure their experience is _____ (successful, successfully).

SESSION 10: PARAPHRASING

RELEVANT KNOWLEDGE

What is *paraphrasing*? Write down your understanding of the term here:

_____

_____

The Merriam-Webster online dictionary defines the word ***"paraphrase"*** *as a restatement of a text, passage, or work giving the meaning in another form.*" In simple terms, "Paraphrasing is actually restating in your own words what someone else said."

- Paraphrasing sends a signal to the speaker that you "got" what the speaker is saying.
- Paraphrasing also shows that you are interested in making sure that what you heard is what the speaker meant to say.

For example, if your customer says, "I really like the Apple Macintosh PC, the Apple Laptop, the Apple iPad and the Apple iPod." You could paraphrase and reply, "Wow! you really like Apple products!"

What is paraphrasing really about? It is all about:

- **Understanding** what the customer is trying to convey; message / issue
- **Internalizing** the customers' message / issue
- Restating the important points **in your own voice**

Why is paraphrasing necessary? Paraphrasing is needed to:

- Clarify what your customer is saying.
- Demonstrate to your customer that you are interested in what he/she has to say.
- Confirm to your customer that you understand what he/she said.
- Ensure that you fully understand the situation before moving ahead with the conversation.

When on a call,there are some phrases on how an agent/customer service representative should start to paraphrase. Some of these are:

- "If I heard you correctly, you were asking if…"
- "Your question is/was……Is that right?"
- "As I understand it, you want to know if…. Am I correct?"
- "So your issue is …"
- "As I understand, you're facing an issue with…. Would that be correct?

If the customer confirms that the paraphrased question is correct, then the agent/ customer service representative should start answering.
The agent's / customer service representative's response should be what the customer wants to hear and know.
Learning how to paraphrase requires practice. When you are talking with someone, practice listening to what he or she is saying and then clarifying it in your own words. As you practice paraphrasing, you will find yourself gaining a better understanding of your customer and others in your life.
The key to paraphrasing is listening carefully to what the other person says, and then translating what you heard into your own words.

EXERCISE 1: Learning to Paraphrase - I

Note: Paraphrasing can be done with individual sentences or entire paragraphs. The first sentence in this exercise has been paraphrased as an example.

- **Original:** The women, whose lives Sakshi had saved, were very thankful to her.
- **Paraphrase:** The women were very thankful to Sakshi for saving their lives.

Paraphrase the sentences given below:
Original: Giraffes like eating leaves and hay, and they can consume 35 kilos of it a day
Paraphrase:_____

_____

Original: Any trip to Delhi should include a visit to Agra to see the Taj.
Paraphrase:_____

_____

Original: The use of recycled resources could stop the destruction of the rainforests.
Paraphrase:_____

_____

Original: From the thousands of motorcycle accidents each year, three-fourths were caused by head injuries. Half of those killed were school-age children. One study reported that wearing a bike helmet can reduce the risk of head injury by 85%. During an accident, a bike helmet absorbs the shock, cushions the head and can save a life
Paraphrase:_____

_____

_____

_____

EXERCISE 2: Learning to Paraphrase - II

Form pairs and use the starting following phrases to fill in the responses of the agents.

- "If I heard you correctly, you were asking if…"
- "Your question is/was……Is that right?"
- "As I understand it, you would like to / want to know if…. Am I correct?"
- "So your issue is …Is that correct?"
- "As I understand, you're facing / you have an issue with…. Would that be correct?

Customer: Could you tell me when will I get my laptop?
Agent: _____

_____

Customer: I don't think my desktop is functioning properly.
Agent: _____

_____

Customer: This is not what I had booked. Please send me the one I chose.
Agent: _____

_____

Customer: My new iPad is completely broken…Am I entitled to another one for free?
Agent: _____

_____

Customer: I need the service-order information sent to me right now!
Agent: _____

_____

EXERCISE 3: Active and Passive Voice

The following sentences are in the passive voice. Convert them to active voice.

1. The products have been sorted by us.
2. The products have been packed.
3. The products had to be sorted so that we could pack them.

The following sentences are in the active voice. Convert them to passive voice.

1. We put the iPads and laptops into the Electronics category.
2. We have counted the number of iPads and laptops.
3. We had packed the iPads and laptops.

Try making simple sentences in the active and passive voice. Go through the assessment If time permits, you can try to attempt the exercise in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Read this:**

Active Voice:	She is arranging her bedroom.
Passive Voice:	Her bedroom is being arranged.
Active Voice:	She has arranged her bedroom.
Passive Voice:	Her bedroom has been arranged.
Active Voice:	She will arrange her bedroom.
Passive Voice:	Her bedroom will be arranged.

⊙**Instruction:** Convert the following sentences into passive voice.

1. I have categorized the items that can be packed together.
2. She has made a list of items packed in each carton.
3. Pooja is making a list of items to be packed separately.
4. You should not pack vegetarian and non-vegetarian food items together.
5. You have to bubble wrap all the glass and porcelain items.
6. This list specifies the order in which the items have to be packed.
7. I will remove the security tags before packing the clothes and glassware.
8. I will fold the garments before they are packed.
9. You must label all the cartons carefully.
10. I have counted the number of cartons to be loaded in the truck.

REVIEW SESSION 3

RELEVANT KNOWLEDGE

The purpose of this session is to evaluate your knowledge and understanding of Sessions 8, 9 and 10.

Methodology: The review evaluations will be **Question 'n' Answer /Role play** based. Answers will be assessed on content, context, grammar, sentence structure and vocabulary based on the sessions that were imparted.

Process: Therewill be one review evaluationfor each session:

- Communicating Effectively
- Opening and Closing a Customer Call
- Paraphrasing

ASSESSMENT

Review of Session 8: Communicating Effectively

1) *Answer each question in the "Questions" sectionas completely as possible, in your own words.*

Questions:

1. When speaking to a customer, over the phone, via e-mail or face-to-face, what *skill* can either please the customer or escalate the issue?
2. How important are communication skills when communicating in a professional environment?
3. How does a person improve his/her communication skills?

2) *Change the verbs marked in bold to Past Continuous Tense and rewrite the given sentences.*

Sentences:

1. A customer is **looking** for a Smartphone.
2. He **is going** to applaud my performance again.
3. We **have thought** of having a talk with him.
4. I am **planning** to find out why our customers **are going** to our competitors' store.
5. Customers **have come** in thousands to see the launch of the new iPhone.
6. Our boss **praised** my team for the success of the project.
7. I **ate**, while Jaspreet Studied.

8. We **think** that a meeting would be a better approach than talking individually.
9. We **forced** him to listen to our opinions on the subject.
10. He **listened** to his worker's suggestions for the first time in his life; our plan **worked**!

3) *Apply effective communication skills to explain your decision to your Manager.*

Role Play

Your Manager asks you to work for an extra hour every day for the entire week, and help your team mate, Akaash, finish his reports.

You've completed all your pending work, and live two hours away from the office.

Before you make your decision, you must think of all the pros and cons of the situation.

- If leave an hour late by bike, you'll end up reaching your home only by 11pm every day, therefore, you will have to request your Manager for a car to pick-up and drop you for the week.
- Your acceptance will showcase your positive attitude towards your team, as well as, make your Manager happy.
- If you decline, then it may showcase your attitude towards your team in poor light, and you might end up upsetting your Manager.

What will you do? Explain your decision to your Manager, using effective communication skills.

_____
_____
_____
_____
_____
_____

****

Review of Session 9 :Greeting a Customer

1) *Answer each question in the "Questions" sectionas completely as possible, in your own words.*

Questions:

1) You work for Gadgetronics, a manufacturing giant that makes computers and smartphones. You are at your store, when customers start walking in. What are the five different ways you can greet a customer?

2) Fill in the blanks in order to complete the dialogues so as to form a conversation between customer and customer sales/service representative.

Scenario-1

A: _____

B: Good Morning!

A: _____ particular _____?

B: Yes, I would like to have a look at some laptops with a printer.

A: _____ brand _____?

B: Which do you have?

A: We have Apple, Dell, Sony, HCL and HP.

B: That's great. I'd like to have a look at them.

A: Sure, Ma'am/Sir. Please come this way.

Scenario-2

A: _____

B: Hello.

A: _____

B: I would like to buy a computer. Could you show me one that is not too expensive?

A: Sure, Ma'am/Sir. What type of computer do you have?

B: I'm not too sure. Something I can carry around.

A: I think you'll find our range of laptops very satisfactory. Would you like to have a look at some of them?

B: Yes.

A: Very good, Ma'am/Sir. Please come this way.

Scenario-3

A: _____

B: Morning!

A: _____

B: I I haven't decided yet. I'm just looking around.

A: Okay, Ma'am. Please _____.

B: I'll do that. Thank you.

Sentences:

1) *Fill in the blanks with the correct adjectives/adverbs.*

Delivering good customer service – sounds like an _____ (easy, easily)task; however, it's how you talk to your customers that, plays an important role.

A _____ (professional, professionally) _____ (friend, friendly)conversation will makes them feel welcome. Here are some

examples of how you can talk to a customer _____ (warm, warmly):

1. Good morning! Welcome to Gadgetronics.
2. My name is Krish, how may I assist you? Or
3. Is there anything in _____ (particular, particularly) that I can help you with?
4. Has your question been answered satisfactorily? Or
5. Have you found what you've been looking for?
6. Is there anything else I can help you with?
7. If you have any additional questions please feel free to ask me.
8. Thank you for being a Gadgetronics customer.
9. We aim to serve you better. Or
10. It was a pleasure serving you.

A _____(Simple, Simply) and pleasant conversation such as this show the customers that they are _____ (real, really) appreciated, and that let help is available.

However, just saying the words is not enough. You need to sound like you _____ (actual, actually)mean it. Politeness and a friendly smile _____ (real, really) helps the customers feel comfortable. You also need to assure them that your services are _____ (ready, readily)available,and you will do all that you can to make sure their experience is very _____ (pleasant, pleasantly).

****

Review of Session 10:Paraphrasing

1) *Answer each question in the "Questions" section as completely as possible, in your own words.*

Questions:

1) What is Paraphrasing? Explain in simple terms.
2) What are the three steps involved when paraphrasing?
3) What does "paraphrasing" convey to a person / customer?
4) Why is it necessary to paraphrase?
5) Describe a minimum of three starting phrases used when paraphrasing?

Sentences:

1) *Paraphrase the original sentences given. Once completed, read out the sentences.*

1) **Original:** The computer, that Sahil had repaired, was working very well.

_____

_____

2) **Original:**Mansi's new laptop has been completely damaged in an accident…Will the company she bought it from, give her another one for free?

_____

_____

_____

3) **Original:** When you go to buy that new computer you were telling me about, make sure you buy it from the Gadgetronics store. They offer the best discounts.

_____

_____

_____

4) **Original**: I think the use of recycled resources in technology would be fantastic!

_____

_____

_____

5) **Original:** From the thousands of computer crashes each year, half are caused by virus attacks. The other half are caused by badly manufactured computers.

_____

_____

_____

2) *Convert the following sentences into passive voice*.
   1. I have categorized the computers that need to be packed together.
   2. She has made a list of computers packed in each carton.
   3. Priyal is helping a customer find a laptop.
   4. Ansh mailed the letter.
   5. You have to paraphrase all the customers' issues.
   6. This list specifies the customer's name for which the Tablet PC has to be packed.
   7. The driver delivered the desktop at the correct address.
   8. The salespeople always clean the computers before they are put on sale.
   9. You must file all the customers' names alphabetically.
   10. Many of our customers inquired about our newly launched laptop today.

****

SESSION 11: VERIFICATION OF INFORMATION

RELEVANT KNOWLEDGE

What do you think the term "Verifying Information" means?

_____

_____

_____

_____

Verifying Information includes:

- All information gathered, can be verified, with the help of the internet.
- The verification process that companies follow is very important as it safe guards the customers' information (bank account details, insurance policy details, product and service order numbers, credit-card numbers, etc.) from being misused or stolen.

Read the following paragraph, aloud:

"Verify names:check customers' first name and last name (*For example:* Rahul Seth), as it is important to make sure if the person calling is an existing or new customer. Confirm land-line and cell phone numbers: Check customers' land-line number / Cell phone number. Check the postal code: Companies provide their agents the use of many directory services to verify customer details (if it an existing customer) that the entered post code matches the already stored information about the customer. If the customer is new, then the details will be recorded and kept for future confirmation. Confirm the email address: Order confirmations and product information are sent to the customers' email addresses. If the email is returned without being delivered, this can be a sign that something is wrong; that the information provided by the customer was not correct. Very few customers provide wrong email addresses, because they want to be notified of their order's status or receive information about their old / new products. Verify service order number: Check customers' confirmation number, service order number (the number given to the customer at the time when customer submits the service order), and order date. End the call: When customers do not provide correct information and do not verify their details to the satisfaction of the agent, or when agents suspect something is wrong, they are required to close the call."

Now, break down the paragraph into simple instructions, for example:

- **Verify name:** Check customers' first name and last name (*For example:* Rahul Seth), as it is important to make sure if the person calling is an existing or new customer.

When you have completed the activity, follow the instructions of your facilitator to enact a role-play.
Read the two sections below carefully. Verification Process-1 is an example of when a customer provides the correct information. Verification Process-2 is an example of what happens when a customer does not provide correct information.

Verification Process -1:
Agent: Sure, I can assist you with that; however, *before we continue I need to verify your account information. Is that okay with you?*
Customer: Yes.
Agent: *May I have your First name and Last name?*
Customer: Sure, that would be Kunal Seth.
Agent: *May I please have your landline phone number and your mobile phone number?*
Customer: Sure. My landline number is 011 – 123 45678, and my mobile number is 77410 56987.
Agent:*Thank you.Would you please tell me if a customer-account number was provided to you when you bought the product?*
Customer: Yes, I was given a customer-account number.
Agent: Thank you. *May I please have your customer-account number, along with your product's model/serial number?*
Customer: The service-order number is XYZ1234. The model number is ABC4567
Agent: Thank you. *Just to confirm I have the right account I see that email address on the account is Kunal.Seth@email.com, is that correct?*
Customer: Yes, that's right.
Agent:*Thank you for verifying your information*. I can now assist your issue.

Verification Process -2:
Agent: *Sure, I can assist you with that; however, I will need to verify your information before we continue. May I have your First and Last name?*
Customer: Sure, that would be Abhaas Kapoor.
Agent: *Thank you. May I please have your landline phone number and your mobile phone number?*
Customer: Sure. My landline number is 011 – 4567 19834, and my mobile number is 79139 69087.
Agent: *May I have your customer-account number please, along with your service-order number?*
Customer: My customer-account number is XYZ1234, and my service-order number MKR6789
Agent: *Thank you. May I please have your bill number?*
Customer: Umm… I don't know where I've put the bill. Will that be a problem?
Agent: *No problem Sir. Do you have the date you bought the product?*
Customer: Yes, I do. I bought it on the 12th of August this year.

Agent: *Thank you. I am going to take just a few moments to check the account here.*
Customer: Sure.
Agent: *Sir, I am unable to find any record of that customer-account number and the service-order number in my systems. Could you please provide your email address and billing address so I may search for your account and order details?*
Customer: Sure, my email address is AbhaasK@email.com and my billing address is No 15, 16th Street, Sector 17, Chandigarh – 18.
Agent: *Sir, I have tried to search with the details you've provided; however, I'm unable to find any related account or service-order. Is it possible that you may have registered with a different address or email address?*
Customer: I may have. I don't remember. My documents are not with me.
Agent: *In that case sir, I would like to suggest you find the bill or customer-account form and call us with the correct details. We will surely assist you with your issue if you are able to verify your details with us.*
Customer: Alright, I will do that. Thank you.
Agent: *Thank you for calling "Online Clothes". This is Dalinder. Have a nice day.*
Customer: Thank you.

EXERCISE 1: Verifying Information

1. Verification of Information -1
Agent: Sure, I can assist you with that; however, *before we continue I need* _____. _____*?*
Customer: Yes. Go ahead.
Agent: _____*?*
Customer: Sure, that would be MaahiGor.
Agent: _____*?*
Customer: Sure. My _____ is xxx – xxxxxxxxx, and my _____ is xxxxxxxxxx.
Agent:_____._____*?*
Customer: Yes. My exam roll-number is CBT345 6780.
Agent: _____. _____*?*
Customer: It is myname@email.com
Agent:_____. I can now assist your issue.

2. Verification Process -2
Agent: *Sure, I can assist you with that;* _____*before we continue.* _____*?*
Customer: Sure.

Agent: _____*?*
Customer: It's Viren Mehra.
Agent:_____.
_____*?*
Customer: Sure. My _____ is xxx – xxxxxxxxx, and my _____ is xxxxxxxxxx.
Agent: _____, *along with* _____*?*
Customer: My _____-_____ number is XYZ1234, and my _____ is IMeMyself___themail_____.
Agent: *Thank you. Sir,* _____ *unable to find* _____ *in* _____.
Customer: How can that be? Please check again. I am sure it's there.
Agent: *I am Sir. Could you please* _____*?*
Customer: Sure, I live at: No. xx, xxth Street, Sector xx, Faridabad – xx.
Agent: *Sir, I have tried* _____*; however, I'm unable to* _____.
Customer: I don't know what to say.
Agent: *Sir, I would like to suggest* _____ _____. *We will surely assist you with your issue,* _____.
Customer: Alright, I will do that. Thank you.
Agent: _____*for calling. Have a nice day.*
Customer: Thank you.

3. Verification of Information -3
Agent: Sure, I can assist you with that; however, *before we continue I need to* _____.
_____*?*
Customer: Yes. What do you need?
Agent: _____*?*
Customer: Sure, that would be Jagpreet Anand.
Agent: _____*?*
Customer: Sure. My _____ is xxx – xxxxxxxxx, and my _____ is xxxxxxxxxx.
Agent:_____._____*?*
Customer: Yes, I have a customer-account number.
Agent: Thank you. _____*?*
Customer: My _____ is xxx xxxx.
Agent: _____*?*
Customer: I got it on the 5th of Sept'2012.
Agent: _____. _____*?*

Customer: My email-id is, Myself@email.com **Agent:**_____. I can now assist your issue.

Form pairs. Frame the verification questions for the agent, and fill in the correct responses for the customer. You can use inputs from the previous section.

EXERCISE 2: Making Meaningful Sentences

Rearrange the italicized words so that the sentences make complete sense.

1. When do we *verifying start information the*?
2. We have *him for bought phone a*.
3. Clean computers *longer attractive and last look*.
4. Phones should be *weeks in cleaned two once*.
5. Even if you wipe *won't if properly, you neat don't them the roomthe furniture, look arrange*.
6. When in doubt, *the instructions follow always*.

Go through the assessment. If time permits, you can try to attempt the exercise in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Instruction:** Rearrange the words in the following sentences to make meaningful sentences.

For Example:

the laptop. am carrying I

Ans: I am carrying the laptop.

1. from the shop. damaged the good returned The customer he bought
2. name of opening has address and Before be customer the account, a verified. bank to
3. customers their organizations always Big to keep try happy.
4. mobile a from bought store. I online phone an
5. airline internet. booked they my on I ticket
6. everyday have important part Computers of life. an become
7. favorite is of sports. one my Football
8. industry. lots Today, the there joining of our youngsters IT
9. software homework. wish was there my that I computer all do could
10. most The love science. that computer I subject is

SESSION 12: DIRECTING A CUSTOMER OVER THE PHONE

RELEVANT KNOWLEDGE

You must be familiar with the figure given below. An explanation of each item is given in Fig 2 and 3. Listen carefully to the instructions given by your facilitator to role play a customer service representative (CSR) / customer.

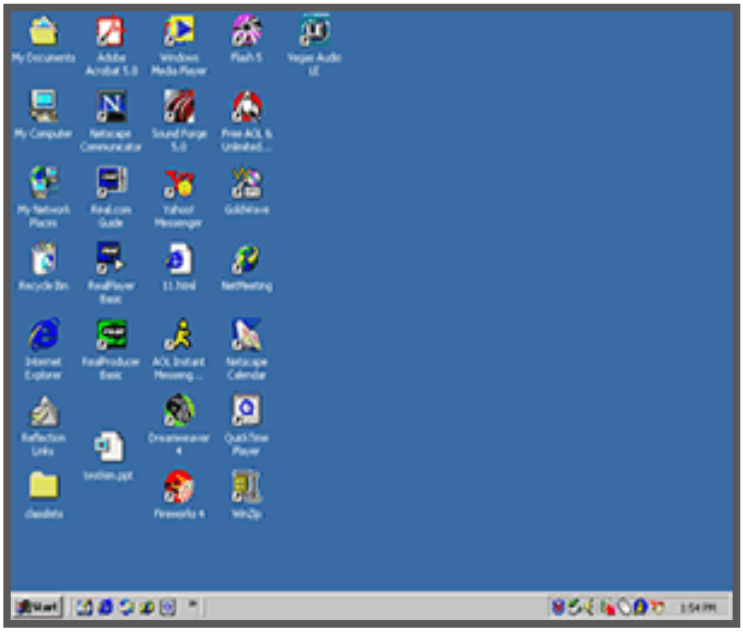


Fig 1 - DESKTOP

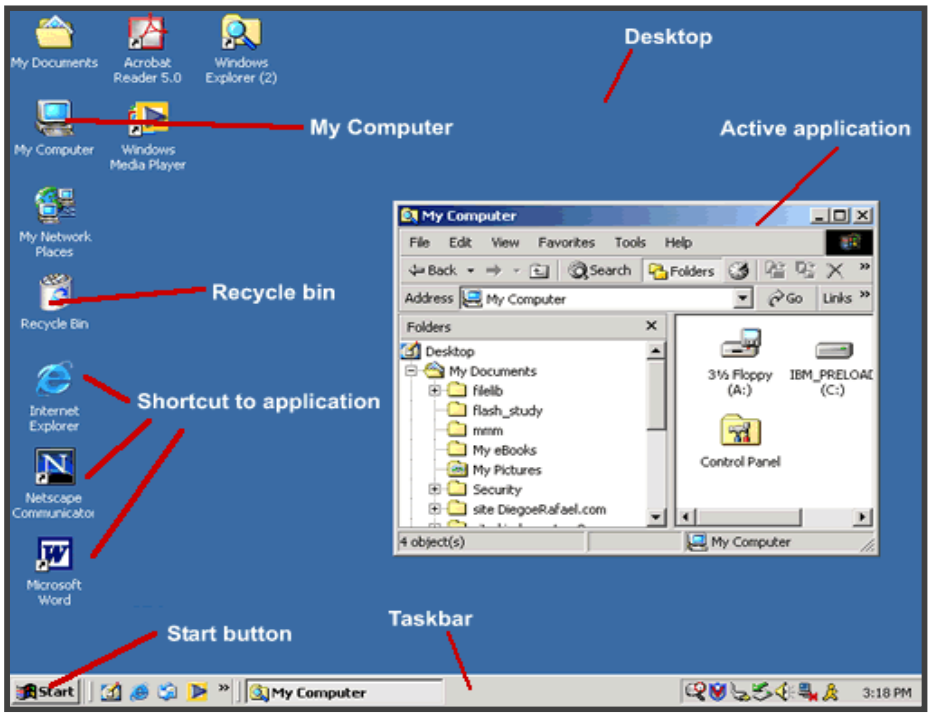


Fig 2

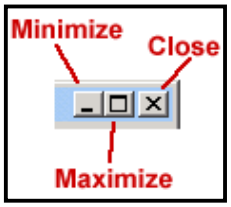


Fig 3

Role Play 1:
Customer asks to be shown the desktop on the CSR's computer. The CSR complies by verbally speaking and pointing out.
Role Play 2:
Customer asks to be shown where the taskbar is. The CSR complies by verbally speaking and pointing out.
Role Play 3:
Customer asks to be shown how to close a document. The CSR complies by verbally speaking and pointing out.
Role Play 4:
Customer asks to be shown where the Start button is. The CSR complies by verbally speaking and pointing out.

EXERCISE 1: Directing a Customer

Fill in appropriate responses and instructions with using Fig-4 & Fig-5.

ISSUE

"Phone is frozen on the menu screen."



Customer: My phone is frozen on the menu screen. I can navigate around. I've tried to make a call, but there is a message saying that there isn't any service. It didn't switch off for a long time either! Can you please help me?
CSR:
Customer: What kind of information do you need?
CSR: I will need the _____ and _____ of your phone please.
Customer: I have a TracFone, but I don't have the paperwork, so I'm not sure of the model.
CSR:
Customer: I think it's a LG220.
CSR: Okay, Thank you! Could you please tell me _____ switched off?
Customer: Yes. Do you know what the matter is with it?
CSR: From what you've described, the phone it seems needs to restart, so let's try and force a restart, shall we?
Customer: Okay. Is it a big problem?

CSR: Not really. This is usually just a tiny issue that can be cleared up quickly. Please try this and let me know the results.

- Remove the battery and wait a few seconds then reinsert the battery.
- Then hold the power button for 30 seconds
- Allow the phone to restart and it should be ready for use again.

Customer: I've never taken the back off, and I don't want to ruin the phone, so can you help me with that?

CSR: No issues! I will guide you through a set of _____ to remove the battery. Will that be okay?

Customer: Yes, absolutely!

CSR: Okay. Kindly perform the following steps, as I call out the instructions:



FIG-4

- Please _____ (1) on the back of your phone, _____ (2).
- Lift _____ (1) and away (2) from _____.



FIG-5

To replace the battery:

- To reinstall the battery, arrange the battery contacts (1) with those in the battery compartment. Press the _____ until it clicks into place (2).

• With the battery in position in the phone, _____ on the back of your phone so that it fits.

Customer: Mission Accomplished! Thank you!

CSR: I hope everything is working well with your phone now. Please let me know if there is anything else, I can be of any assistance with. I will be glad to answer any follow up questions you may have.

Customer: No. Everything's working just fine. Thank you, once again!

CSR:_____

EXERCISE 2: Modals

- Select the right modals and fill in the blanks:

  1. _____ you like me to show you the way? (Could, Should, Would)
  2. I _____ check and let you know if we have this shirt in size XL. (will, shall, can)
  3. _____ I help you? (Can, May, Might)
  4. I _____ take you there if you like. (will, could, should)
  5. You _____ try our new arrivals here. (could, would, will)
  6. Turn left and walk straight down – you _____ be able to find the Customer Care desk there. (could, can, should)

- Make a sentence with one of the following modals: might, could, should, shall, can, will, would, may

Go through the assessment. If time permits, you can try to attempt the exercise in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Read this:**

Has/Have to - Used to express something that is certain or necessary.

The singer **has to** be Smriti from our class.

We **have to** get there by seven.

Ought to - Used to express an obligation or something that is probable.

The Indian team **ought to** win the match.

We **ought to** let them know when we are arriving.

Had better - Used to express warning, recommendation, or hope.

You **had better** complete your essay before Monday.

You **had better** take your raincoat today.

You **had better** be right about the car coming to get us.

⊙**Instruction:** The following is a conversation between a salesman and a customer . Fill in the blanks with appropriate modals.

Salesman: Hello ma'am! How _____ (*may* / *will*) I help you?

Customer: Well, I wanted to buy a gift for my daughter. _____(*Should* / *Could*) you direct me to the kid's section?

Salesman: Sure, ma'am! Please follow me. It's right here. Are you looking for something specific?

Customer: I'm not sure! _____ (*Would* / *Can*) you help me find a good gift for her? She is just six years old.

Salesman: In that case, you _____ (*should* / *will*) take a look at our gifts section here…this section is especially for girls. You _____ (*must* / *can*) choose from a variety of gifts here. How about this pair of earrings here?

Customer: Well, I was thinking of educational gifts…you know…the ones that help children learn even as they play.

Salesman: Such gifts are very popular these days. They are on that shelf near the counter. These wooden blocks are specially recommended by teachers…You _____ (will / must) buy these.

Customer: Well, this is exactly what I was looking for.

Salesman: _____ (Should / Would) you like this gift to be gift-wrapped ma'am.

Customer: Yes, please. And I _____ (must / would) like to take a look at the Women's section also. Is it on the same floor?

Salesman: No, ma'am it's on the second floor. You _____ (will/ could) take the elevator to go there.

Customer: Oh! I _____ (have to / would) buy some stuff for the birthday party also. Where is the grocery section?

Salesman: It's on the ground floor.

Customer: Thanks!

Salesman: Is there anything else I _____ (will / can) help you with?

Customer: No, thanks! You have been a great help!

SESSION 13: HANDLING AN ANGRYCUSTOMER

RELEVANT KNOWLEDGE

ANGRY: annoyed, irate, enraged, furious and irritated.
Read aloud the situation given below:

"A customer purchased a new mobile phone from a reputable cell phone provider. Three months later, the phone started to malfunction and the customer sent the phone back to the company for service.
The company stated that they would not replace the phone because it showed signs of rust on the battery. The customer informed the company that the phone had not been exposed to water; however, all of the customers' calls to the company's customer service department, were met with the ridiculous excuse that the rust was due to the phone's normal exposure to air – so the company was not responsible, and therefore they would not replace it or fix the problem free of charge!"

1. How would you feel, if you were the customer, in the above situation?
   Would you feel *"nice"*, *"upset"*, *"pleasant"*, *"irritated"*, *"unconcerned"*, *"cheated"*, *"happy" or "angry"* OR would you feel *"angry"*, *"cheated"*, *"upset"*, *"irritated"*, *etc*.
2. How would you speak to the company's customer service representative in such a situation?
   Would you speak *"nicely"*, *"pleasantly"*, *"indifferently"*, *"happily" or "angrily"?*
3. What should be the lesson the company should learn from this situation? Write your answer.

_____
_____
_____
_____

In a career as a customer service representative, one does come across angry customers. Such customers leave zero ground for conversation or negotiation. There's nothing much that thecustomer service representative can do when the customer is angry. The cause of the anger may be valid or otherwise.
When customers are concerned, upset or irritated, a customer service representatives need to act quickly to regain their trust and confidence. Customer service representatives use the following techniques to develop skills that will help them deal effectively with angry customers.

Remain calm: When answering an angry customers' call, always be patient. Realize that any anger that the customer is displaying is not directed towards

you personally. Therefore, do not respond with emotion. An angry customer will just get even angrier if you respond with any aggression. Takes quiet deep breaths and wait patiently for your turn to speak. Be warm and friendly and remain calm at all times.

Listen: Calmly listen to what the customer has to say, without any interruption. Listening to an upset customer is half of the process helping to reduce a customer's emotions, making the person easier to deal with. The other half is doing something to ease the tension.

Apologize: Express sincere personal regret for the bad experience if appropriate; apologize on behalf of the organization.
For example:

- "I apologize that (specify the issue) happened"
- "I am sorry you ran into that issue"
- "You are right; it is our error; and I apologize"
- "I'm sorry your expectations weren't met. Let's focus on finding a solution that will make you happy."

Paraphrase: Re-phrase the customer's complaint to ensure that you correctly understand the issue. The customer is more to likely calm down if he/she realizes you understand the situation.

Be empathetic; to identify with and understand someone else's situation: It is important to show empathy when dealing with an angry customer. Remember, customers want to be heard. The ideal way to let your customer know you hear and understand their anger is to acknowledge it. You're letting the customer know you understand without necessarily agreeing. For example:

- "You're right, it can be frustrating to read and fill out all of this paperwork"
- "I understand how frustrating writing this down must be."

No matter how one feels inside, a customer service representative must always speak very courteously, confidently and politely to the customer. This tells the customer that you, the customer service representative, are in-control of the situation, are experienced in handling angry customers and can perhaps even find a solution to their issue!

Act to improve the situation:

- ***Fix it!***-
  - Provide a solution that will make your customer happy.
  - Correct the issue for the specific customer and also look for long term corrective measures.

- It may be appropriate to reassure the customer that you will be available to assist in the event that another different problem should occur again.

- ***Explain what happened***–
    - Recap the issue and solution.
    - Restate the issue and every change you've made to correct the issue so that the angry customer knows exactly what was done.

Follow up: Leave a positive impression. By displaying compassion and attentiveness after an issue has been solved send a powerful message to the customer that you really care about each individual customer. This follow-up after the anger has subsided and the solution has been proven to be effective may be enough to retain loyal customers and earn a few new ones.

Thank the customer: Thank the customer for taking the time to call and let you know about the issue. Tell the customer that he/she has done your company a favor by notifying your company about an issue other customers may also be experiencing.

End the call on a high-note: Close all such calls by thanking customers, and telling them that you appreciate and value them and their feedback. And, that you look forward to serving them in the best possible way.
Now, study the scenario given below. If you were the customer,what would you want to hear from thecustomer service representative?
If you were thecustomer service representative, how would you handle the situation?
You can use the above given points to write your answer in your notebooks.

"A customer purchased a new Laptop from a well-known computer manufacturer. A few months later, the laptop malfunctions and the customer wants the company to replace the laptop or provide service that's free of charge.
The company responds that it is not responsible and that it would not replace the Laptop as the laptop showed signs of some parts being short circuited because of water. The customer informs the company that water has never been spilt on the Laptop; however, all of the customers' calls to the company's customer service department were met with one negative excuse after another.
As a result of this, the customer has become very angry."

EXERCISE 1: Handling an Angry Customer

Fill in the blanks with the options given below so as to complete the conversation between a customer service representative and a customer.

- As I understand, the music system installed in your laptop is not functioning properly. Am I correct?
- I am so sorry for your inconvenience, Ma'am. May I please have a moment to check your records?
- Thank you for your patience, Ma'am.
- I understand you'd like your laptop replaced, would that be correct?
- I really wish I could Ma'am; however, company policy wouldn't allow me to do that. What I can do, however, is replace your laptop's music system with a brand new one! Would that be okay with you?
- How can I help you, Ma'am?
- So I can better serve you, and get started on solving the issue,
- Could you please tell me what is the issue you're facing Ma'am?
- Ma'am, please let me assure you that I am here to assist you in finding a solution to the issue you're facing right away. Will that be okay with you?
- Thank you Ma'am. Would you please tell me when you bought the laptop?
- Thank you, Ma'am. We really appreciate you bringing the issue to our notice. It was a pleasure serving you.

CSR: _____?
Customer: I want a replacement for this laptop, and I want it now!
CSR: _____?
Customer: Yes.
CSR: _____?
Customer: The stereo is not working!
CSR: _____?
Customer: Yes!
CSR: _____
_____?
Customer: Yes, I guess so.
CSR: _____?
Customer: I bought it eight months ago, and it's been giving me an issue for the past four months! This is the fifth time I'm calling you people!
CSR: _____?
Customer: Why?
CSR: _____.
Customer: Ok, fine!

CSR: _____
Customer: So, will you be replacing my laptop with a new one, for free?
CSR: _____
_____.
Customer: Oh, absolutely! That will be great! Thank you so much!
CSR: _____

EXERCISE 2: Present Perfect Tense

Choose the correct option:

1. I am afraid we can't do that.
   (a) Present Perfect Tense (b) Past Perfect Tense (c) Neither

2. I had bought it eight months before.
   (a) Present Perfect Tense (b) Past Perfect Tense (c) Neither

3. We have to follow our company's policy.
   (a) Present Perfect Tense (b) Past Perfect Tense (c) Neither

4. I have brought the bill with me.
   (a) Present Perfect Tense (b) Past Perfect Tense (c) Neither

5. We had replaced your mobile phone's battery.
   (a) Present Perfect Tense (b) Past Perfect Tense (c) Neither

6. We have fixed your laptop's stereo.
   (a) Present Perfect Tense (b) Past Perfect Tense(c) Neither

7. The warranty period has got over.
   (a) Present Perfect Tense (b) Past Perfect Tense (c) Neither

8. I had already complained before.
   (a) Present Perfect Tense (b) Past Perfect Tense (c) Neither

Go through the assessment. If time permits, you can try to attempt the exercise in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Read this:**

Present Perfect Tense

1. I **have had** enough of those chocolate cakes.
2. She **has marked** the chapter.
3. You **have done** nothing to make her happy.

Past Perfect Tense

1. I **had had** enough of those chocolate cakes.
2. She **had marked** the chapter.
3. You **had done** nothing to make her happy.

⊙**Instruction:** Fill in the blanks with the correct present and past perfect forms of the verbs in brackets.

1. One of the most difficult customers I_____ (face) is Mrs. Anju Mukherjee.
2. Neither I nor Tara were able to handle this lady's complaints about the mobile phone she _____ (buy) last week.
3. Naresh _____ (check) her mobile phone and found out the problem.
4. His friendly nature, along with his sound technical knowledge, _____ (prove) proved useful in handling this difficult customer.
5. The problem that none of us were able to solve for so long, _____ (solve) in only a few minutes by him!
6. I _____ (come) across many difficult customers in my life, but none has been as bad as Mr. Gupta.
7. He _____ (order) for a toaster, and after I _____ (make) the bill, he called and cancelled it.
8. I had to politely remind him, as I _____ (remind) him twice before, that he could not cancel his order after the bill was made.

REVIEW SESSION 4

RELEVANT KNOWLEDGE

The purpose of this session is to evaluate your knowledge and understanding of Sessions 11, 12 and 13.

Methodology: The review evaluations will be **Question 'n' Answer** and **Role play** based. Answers will be assessed on Content, Context, Grammar, Sentence structure and Vocabulary based on the sessions that were imparted.

Process: There will be one review evaluation for each session:

- Verification of information.
- Directing a customer.
- Handling an angrycustomer.

ASSESSMENT

Review of Session 11:Verification of Information

Question:

1) *Answer the question in the "Questions" sectionas completely as possible, in your own words.*
    1. How much information can be verified, and with the help of what?
    2. What is the process of verifying information that most companies follow?
    3. How would a company know if the information provided by the customer is incorrect?
    4. Why is the verification process that companies follow important?

Role Play:

2) *Complete the Verification Process. After completing the dialogues, you need to present the conversation before the class.*

Role-Play - 1:Verification Process -1:

Customer service representative: Sure, I can help you with sourcing your order number; however, *before we continue* _____

_____. *Is that* _____*?*

Customer: Yes.

Customer service representative: *May* _____*?*

Customer: Sure, that would be Karan Thakur.

Customer service representative: *May I please _____and your _____?*

Customer: Sure. My _____ is 012 – 45678910, and my _____ is 98456 78910.

Customer service representative:*Thank you.Would you please tell me if a _____ number was provided to you when you bought the product?*

Customer: Yes, I was given a _____.

Customer service representative: Thank you. *May I please have the date you placed the order, along with your product's model/serial number?*

Customer: The date is the 17th of June. The Desktop's model number is DTP3456

Customer service representative: Thank you. *Just to confirm I have the right details, I see that _____in our files is Karan.Thankur@email.com, is that correct?*

Customer: Yes, that's right.

Customer service representative:*Thank you* _____. I can now assist you with your issue.

Sentences:

3) *Rearrange the words in the sentencesbelowto make meaningful sentences.*
   a) the I day. laptop to every work carry
   b) Gadgetronics. another customer Notebook The from bought
   c) software all work. wish do was there our that I computer could
   d) name delivering has of address and When the be customer the a verified. package, and to
   e) customers their organizations always Big to keep try happy.
   f) most The love science. that computer I subject is
   g) PC a from new store. I website Tablet a bought
   h) sold bought his and a Macintosh new laptop. on Armaan the APPLE internet, brand old computer
   i) everyday have important part Computers of life. an become
   j) industry. lots Today, the there joining of our youngsters IT

****

Review of Session 12:Directing a Customer

Role Play:

1) *Rearrange the given phrases, and fill in the blanks in order to complete the dialogues and form a coherent conversation between a customer service representative and a customer.*

1: "Direct the Customer"

a. Once the folder is open, right-click on a blank space inside the folder and, once again, you will see the drop-down menu appear.
b. Please make sure the files you want copied, is closed.
c. Please select "Copy" from the menu that appears.
d. Now, please select the option "Paste."
e. The file is copied to the folder. Depending on the size of the file, this may happen immediately or take some time.
f. Next, please right-click on the file that you want to copy.
g. Now, please double-click on the folder to which you want to paste the file.
h. You will see a drop-down menu.
i. To close the file, please click the red "X" in the top-right corner of the window.

Customer service representative: _____.

Customer: I'm sorry, but you'll have to tell me how.

Customer service representative:_____.

Customer: Oh, ok. Done! What next?

Customer service representative:_____.

Customer: Ok.

Customer service representative: You will see a drop-down menu.

Customer: Yes, I do.

Customer service representative:_____.

Customer: Uhm… Okay, selected.

Customer service representative:_____.

Customer: Ok, double clicked.

Customer service representative: _____

_____.

Customer: I have and I do. What do I select now?

Customer service representative: _____

_____.

Customer: Okay, Done.

Customer service representative:_____

_____.

Customer: Yes, it has. Thank you so much!

2: "Direct the Customer Again!"

a) Now, please choose one of the options that appear in the menu. You can either select switch off the computer entirely, or you can choose to log off.
b) You should be able to see the "Shut-Down" / "Log Off" button in the Start Menu. Please confirm once you do.
c) Please click on the "Start" button at the bottom right corner of the taskbar.
d) A drop-down menu should appear next to the "Shut-Down" / "Log Off" button.
e) Thank you. Please click on the "Shut-Down" / "Log Off" button.

Sentences:

Customer service representative: _____
_____
_____

Customer: Okay.

Customer service representative: _____
_____
_____

Customer: Yes, I do.

Customer service representative: _____
_____
_____

Customer: Okay, I have.

Customer service representative: _____
_____
_____.

Customer: Yes, it has.

Customer service representative: _____
_____
_____.

Customer: Okay, done. Thank you.

Sentences:

2) *Fill in the blanks with appropriate modals, to complete a conversation between the customer sales representative and acustomer .*

Customer service representative: Hello ma'am! How _____ (may / will) I help you?

Customer: Well, I wanted to buy a Desktop for my daughter. _____ (*Should* / *Could*) you direct me to the computers' section?

Customer service representative: Sure, ma'am! Please follow me. Its right here…Are you interested in any particular brand?

Customer: I'm not sure! _____ (*Would* / *Can*) you help me find a good brand for her? She is just 10 years old.

Customer service representative: In that case, you _____ (*should* / *will*) take a look at our range of kids' computers by Gadgetronicshere they are. They've been made especially for children below 13. You _____ (*must* / *can*) choose from a variety of models and colors here…How about this one in pink and white here?

Customer: Well, I was thinking of something in blue, that's her favorite color.

Customer service representative: Good choice. Blue is very popular these days. They are on that shelf near the counter.

Customer: Well, this is exactly what I was looking for.

Customer service representative: While you're looking at those, _____ (*will*/may) I show you some of these educational software that are specially recommended for school going children… they are subject guides that will help your daughter do her homework, as well as, guide her when she studies for her exams. You _____ (will / must) buy one of these for her.

Customer: Excellent!

Customer service representative: _____ (Should / Would) you like me to gift wrap the computer Ma'am?

Customer: Yes, please.

Customer Service representative: Is there anything else I _____ (will / can) help you with, Ma'am?

Customer: No, thanks! You have been a great help!

****

Review of Session 13:Handling an Angry Customer

Questions:

1) *Answer the question in the "Questions" section as completely as possible, in your own words.*
    a. When facing an issue with a dis-satisfied customer, what must a company do to ensure customer satisfaction?
    b. What must a company do if it is responsible for an issue?
    c. What must a company do, *if* it is *not* responsible for the issue?
    d. What must customer service representatives do when faced with customers who are customers are concerned, upset or irritated?
    e. What do customer service representatives use to help them deal with angry customers?
    f. What are the 9 steps that a good customer service representative uses to effectively handle an angry customer?

Role Play

2) *Fill in the blanks with the options given given, so as to complete the conversation between a customer service representative, and an angry customer.*

a) Thank you, Ma'am. We really appreciate you bringing the issue to our notice. It was a pleasure serving you.
b) I am so sorry for your inconvenience, Ma'am. May I please have a moment to check your records?
c) Thank you for your patience, Ma'am.
d) I understand you'd like your laptop replaced, would that be correct?
e) I really wish I could Ma'am; however, company policy wouldn't allow me to do that. What I can do, however, is replace your laptop's music system with a brand new one! Would that be okay with you?
f) How can I help you, Ma'am?
g) As I understand, the music system installed in your laptop is not functioning properly. Am I correct?
h) So I can better serve you, and get started on solving the issue,
i) Could you please tell me what is the issue you're facing Ma'am?
j) Ma'am, please let me assure you that I am here to assist you in finding a solution to the issue you're facing right away. Will that be okay with you?
k) Thank you Ma'am. Would you please tell me when you bought the laptop?

Customer service representative: _____?
_____.
Customer: I want a replacement for this laptop, and I want it now!
Customer service representative: _____
_____?
Customer: Yes.
Customer service representative: _____
_____?
Customer: The stereo is not working!
Customer service representative: _____
_____? _____.
Customer: Yes!
Customer service representative: _____
_____?
Customer: Yes, I guess so.
Customer service representative: _____
_____?
Customer: I bought it eight months ago, and it's been giving me an issue for the past four months! This is the fifth time I'm calling you people!
Customer service representative: _____
_____?
Customer: Why?
Customer service representative: _____
_____.
Customer: Ok, fine!
Customer service representative: _____
_____.
Customer: So, will you be replacing my laptop with a new one, for free?
Customer service representative: _____
_____.
Customer: Oh, absolutely! That will be great! Thank you so much!
Customer service representative: _____
_____.

Sentences:

3) *Fill in the blanks with the correct Present and Past Perfect forms of the verbs in brackets.*

   a) One of the most difficult customers I_____ (face) is Mr. Anand Singh.
   b) Neither Tara nor I were able to handle this lady's complaints about the Smartphone she _____ (buy) last week.
   c) I had to politely remind him, as I _____ (remind) him twice before, that he could not cancel his order after the bill was made.

d) Mira _____ (update) her computer.
e) His friendly nature, along with his sound technical knowledge, _____ (prove) proved useful in handling this difficult customer.
f) The problem that none of us were able to solve for so long, _____ (solve) in only a few minutes by him!
g) Gurmeet _____ (handle) many difficult customers in his career as a customer sales representative.
h) He _____ (order) for a laptop, but later he _____ (change) his mind, and ordered a desktop.

****

SESSION 14: HANDLING CUSTOMER QUERIES

RELEVANT KNOWLEDGE

If you work as a customer service or sales representative, you will have to answer a lot of queries, i.e. questions, asked by their customers.
Some common statements you would use frequently are:.

1. “How can I help you, Ma’am/Sir?”
2. “Is there anything else I can help you with?”
3. “Of course, I can help you with that.”
4. “It’s my pleasure, Ma’am/Sir.”
5. “It was a pleasure serving you Ma’am/Sir.”
6. “I’m glad I could help. Is there anything else you’d like to know Ma’am/Sir?”

When a customer *service* or *sales* representative is approached or called by a customer, he or she should greet the customer with a polite “How can I help you, Ma’am/Sir?
The customer *service* or *sales* representative may also ask the customer if he/she can be of further assistance. When the customer *service* or *sales* representative is thanked by the customer, he/she should say either “It was a pleasure serving you Ma’am/Sir.” Or “It’s my pleasure, Ma’am/Sir” instead of “You are welcome, Ma’am/Sir.”
Some important things to remember are:

- **Listen actively.** Accurately listening to customers is as important as talking to them. Efficient listening is focussing on everything the customer has to say.
- **Paraphrase.**To ensure that you're capturing the right information, a customer sales representative must repeat *in their own words i.e. paraphrase* what they’ve heard. This shows customers that you are paying attention to them and their needs. This also aassures the customers that the customer sales representative is attempting to process and understand what is being asked or said; it helps to avoid any communication errors. Customer sales representatives need to paraphrase customer queries, as well as, any other important information that the customers may provide.
- **Provide practical details.** Customer sales representative should provide customers with information that helps them understand the products and services satisfactorily.
- **Smile.** Customers can hear the smile in the customer sales representative’s voice when they answer the phone. No matter what type of day the customer sales representative may be experiencing, all of that is not important when they're assisting a customer. It is important

to provide customers the most pleasant, memorable experience possible when they call.

EXERCISE 1: Handling Customer Queries

Rearrange the jumbled words in order to complete the conversation between Sales Rep and Customer. The jumbled words have been italicized.

Sales Rep: Yes, Ma'am/Sir. How can I help you?
Customer: I just wanted to ask you if *this I exchange cell could phone*.

_____

Sales Rep: *Could me tell it wrong what's you with*?

_____

Customer: The phone keeps switching off by itself although I keep the battery well charged.
Sales Rep: I see. *When it buy you did*?

_____

Customer: I bought it two months ago.
Sales Rep: Okay, Ma'am. *Since not is over warranty the yet period*, we will replace the item.

_____

Customer: Thank you.
Sales Rep: It's my pleasure, Ma'am/Sir.
Sales Rep: How can I help you, Sir/Ma'am?
Customer: *I to discount about inquire wanted scheme your*.

_____

Sales Rep: We have different schemes for different products. *Which you know like would to about product?*

_____

Customer: Adidas.
Sales Rep: For Adidas, you will get a 15% discount for a purchase of 2000 Rupees, 25% discount for a purchase of 4000 Rupees and 50% discount for a purchase of 7000 Rupees.
Customer: Great! Thanks.
Sales Rep: Is there anything else I can help you with?
Customer: No, *be that all will*. Thanks again.

_____

Sales Rep: No problem, Ma'am/Sir.

EXERCISE 2: Reported Speech

Choose the option that is in the corresponding direct speech.

1. The customer asked the salesperson if that TV was on sale.
   (a) "Is this TV on sale?"

(b) “Is that TV on sale?
(c) “Was that TV on sale?”

2. The salesperson told that customer that the TV was not on sale.
   (a) “The TV is not on sale.”
   (b) “Is the TV not on sale?”
   (c) “The TV was not on sale.”
3. The customer asked the salesperson how much the TV cost.
   (a) “How much the TV cost?”
   (b) “How much does the TV cost?”
   (c) “How much does the TV costs?”
4. The salesperson told the customer that the TV cost 7500 Rupees.
   (a) “The TV cost 7500 Rupees.”
   (b) “The TV costs 7500 Rupees.”
   (c) “Does the TV cost 7500 Rupees?”
5. The salesperson told the customer that the price was fixed.
   (a) “The price was fixed.”
   (b) “That the price is fixed.”
   (c) “The price is fixed.

Go through the assessment. If time permits, you can try to attempt the exercise in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Read this:**

Direct speech: Anuskha: “Shall I give the presentation?”
Reported speech: Anushka asked if she should give the presentation.

Direct speech: Manager: “Yes, Anuskha. You should give the presentation.”
Reported speech: The manager told Anushka that she should give the presentation.

⊙**Instruction:** Change the following sentences into reported speech.

1. Customer: “I got this gift coupon yesterday. Can I redeem it here?”
   _____.
   Salesperson: “Yes Sir, you can.”
   _____.
2. Customer: “Do you follow an exchange and refund policy?”
   _____.
3. Salesperson: “We have a strict “no refund” policy.”
   _____.

Salesperson: “You can exchange the item within a week of purchase, but only if the price tag is still in place.”

_____

_____.

4. Customer: “Excuse me, could you tell me how much VAT you charge?”

   _____.

   Salesman: “We charge only 12% VAT, Sir.”

   _____.

5. Salesman: “Can I help you, Ma’am?”

   _____.

   Customer: “Yes, I lost the invoice. Could you make me another one?”

   _____.

   Salesman: “Sure, Ma’am. Just give me a minute.”

   _____.

SESSION 15: CLARIFYING

RELEVANT KNOWLEDGE

Whencustomers call, the customer service representative needs to ask the customers a few questions to clarify what it is they want or what the issue is. The following are some of the common phrases which are often used by call center customer service representatives:

1. Which _____ would you like?
2. What kind of a _____ are you interested in?
3. Do you have any _____ _____ in mind?
4. Would you like it in any particular _____?
5. Would you like to subscribe to our _____?
6. Could you be a little more _____ about when you first noticed the issue? Was a week back or a little longer?
7. So what you're saying is that the mobile _____ to you, is not the same one you had _____, would that be correct?
8. Am I correct in understanding that you would like to _____ in the next survey we conduct?

Think and fill in the blanks with the correct answers and write the sentences in your notebook.

EXERCISE 1: Clarifying

Rearrange the following sets of sentences in order to form conversations between a Customer Service Representative (CSR) and a Customer.

Scenario – I

a) CSR: For which standard are you interested in?
b) Customer: 250 to 500 Rupees.
c) Customer: Sure.
d) CSR: Very good. What the price range you are looking at?
e) Customer: Standard XI (eleven).
f) CSR: Thank you. Could you please provide me with your postal address, in order for us to mail you the DVD?
g) Customer: Hi! Does your company sell any "School Self-Help Guide" DVDs?
h) CSR: Yes, we do. Which subject would you like; Science, English or Computers?
i) Customer: Computers.

Scenario – II

a) CSR: Now, could you please open a new word document, and type your name?
b) Customer: Okay, done.

c) CSR: Could you please check and let me know if the cable that runs from the keyboard to the central processing unit (CPU) tower, is fit in the socket properly?
d) Customer: Yes, exactly!
e) CSR: Can you tell me what the issue you're facing is?
f) Customer: Great! I can see my name. Thank you!
g) CSR: As I understand, whenever you type on the keyboard, the action does not translate itself on to the document, thus leaving the open page blank. Would that be correct?
h) Customer: Four days ago.
i) CSR: So your keyboard is not functioning properly. Am I correct?
j) Customer: It's a little loose.
k) CSR: Could you push it in the socket firmly?
l) Customer: When I type anything no words appear on the document. It remains empty.
m) CSR: Thank you. Could you tell me when did you first notice the issue?
n) Customer: Okay.
o) CSR: Could you please let me know what happens?
p) Customer: My keyboard is not working. I need one of your computer technicians to come and repair it?
q) CSR: Thank you.
r) Customer: Yes.

EXERCISE 2: Framing Questions

Choose the options which could be the appropriate question for the given statements.

1. The train to Mumbai leaves at 5:45 p.m.
    (a) When does the train to Mumbai leave?
    (b) Which train leaves at 5: 45 p.m.?
    (c) Where does the train leave?
2. Tara is going to the mall with Smita.
    (a) Who is going to the mall with Smita?
    (b) Who is Tara going to the mall with?
    (c) Where do Tara and Smita want to go?
3. He wants to buy a book.
    (a) What does he want to buy?
    (b) Which book does he want to buy?
    (c) What does he want to do?
4. She should meet him at school.
    (a) Where should she meet him?
    (b) Why should she meet him?
    (c) Who should meet her?

5. The lunch will arrive at 12:30 sharp.
    (a) When will the lunch arrive?
    (b) Who sends the lunch?
    (c) Where is the lunch?
6. It is Tina's birthday tomorrow.
    (a) Whose birthday is it tomorrow?
    (b) Who is Tina?
    (c) What day is tomorrow?

Go through the assessment. If time permits, you can try to attempt the exercise in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Instruction:** Choose the question that should follow what the customer says.

For Example: Customer: I would like a cold drink, please.
Your question:
a. When cold drink would you like, ma'am?
b. Which cold drink would you like, ma'am?

1. Customer: I'm looking for formal shirts.
   Your question:
   i. Do you have any particular brand in mind?
   ii. Are you looking for a shirt, ma'am?
2. Customer: I would like an ice-cream.
   Your question:
   i. When flavor would you like?
   ii. Which flavor would you like?
3. Customer: Could you show me a pair of jeans please?
   Your question:
   i. Sure ma'am! Are you looking for a particular color or brand?
   ii. Sure ma'am! Can you look for a particular color or brand?
4. Customer: I need five packets of Ching's Secret noodles.
   Your question:
   i. Shall you want egg noodles or vegetarian noodles?
   ii. Do you want egg noodles or vegetarian noodles?
5. Customer: I need to exchange this sweater. This is too small for me.
   Your question:
   i. You can try out the medium size?
   ii. Would you like to try out the medium size?

6. Customer: I like the phone but I don't like the color.
   Your question:
   i. This phone comes in five different colors, Sir. Would you like to take a look at them?
   ii. This phone comes in five different colors, Sir. What you would like to take a look at?
7. Customer: I am looking for ChetanBhagat's books.
   Your question:
   i. We have all of them, ma'am. What one do you want?
   ii. We have all of them ma'am. Which one do you want?
8. Customer: I saw a beautiful vase here last week – can you please find that for me?
   Your question:
   i. Where was the color of the vase?
   ii. What was the color of the vase?
9. Customer: Can you show us a cot?
   Your question:
   i. Should I show you a double bed or a single bed, Sir?
   ii. How I show you a double bed or a single bed, Sir?
10. Customer: I need to buy a gift for my niece. Could you help me out?
    Your question:
    i. Why are you looking for something in particular?
    ii. Are you looking for something in particular?

SESSION 16: THE CALL FLOW

RELEVANT KNOWLEDGE

What do you think is the meaning of the term "call flow"? Write your answer here.

_____
_____
_____
_____
_____
_____

Do you know- The telephone is one of the best brand-building devices. Over the telephone agents get 5-to-30 minutes of a customer's full attention; depending on the issue. If the agent gets the interaction right, he/she can create a memorable experience for the customer, generate positive word-of-mouth advertising, and build customer loyalty.This leads to a better brand image and increased profits. Getting the interaction "right" usually requires a call flow of some kind.

The following 11-point call plan (See "Call-Flow Chart") focuses on creating a warm customer-focused experience and building a better brand image.

1. Standard **opening** (Smile. State own name and Company's name, and ask for Issue)

    - "Good morning" or "Good afternoon. Customer Care. This is Preetha."
    - "Thank you for calling Customer Care. This is Preetha. How may I help you?"

2. **Paraphrase** issue and check for confirmation (Paraphrase: to retell something in your own words)

    - "So, what you're saying is you want to / you have a ..... would that be correct?"
    - "From what I understand, you would like to / your ……. would that be correct?"

3. Ask for **verification** of details

    - "May I please have your first name and last name?
      May I have your phone number, postal address and email-id please?
      May I please have the account / bill / model number of the product? (If applicable)"

(The call will only proceed if the customer has verified / confirmed all his details.)

4. **Bridge to questioning**

   - "In order to find out what happened, I will need to ask you some questions."
   - "Do you mind if I ask you some questions so we can find out what has happened?"
   - "For me to assist you better, may I ask you a few questions?"

5. Question customer about **details** of the issue (Use *please* and *thank you*)

   - "Can you tell me when you first noticed the problem with ……?"
   - "For how long has it been …….?"
   - "When did you buy the product…?"
   - "Have you checked the…..?"
   - "Thanks. I have one final question."

6. **Assure** customer

   - "This is just a small issue. Please be sure I will find a solution."
   - "There's nothing to worry. I will guide you through the instructions."
   - "I will get that information for you."

7. Seek customer's **agreement** for following troubleshooting steps (troubleshooting steps: a set of instructions).
   - "We'll have to perform a few troubleshooting steps / instructions. Is it okay with you?"
8. **Direct** customer
   - "Please place the ……over the …… and click on ……..on the mouse and then click on……..."

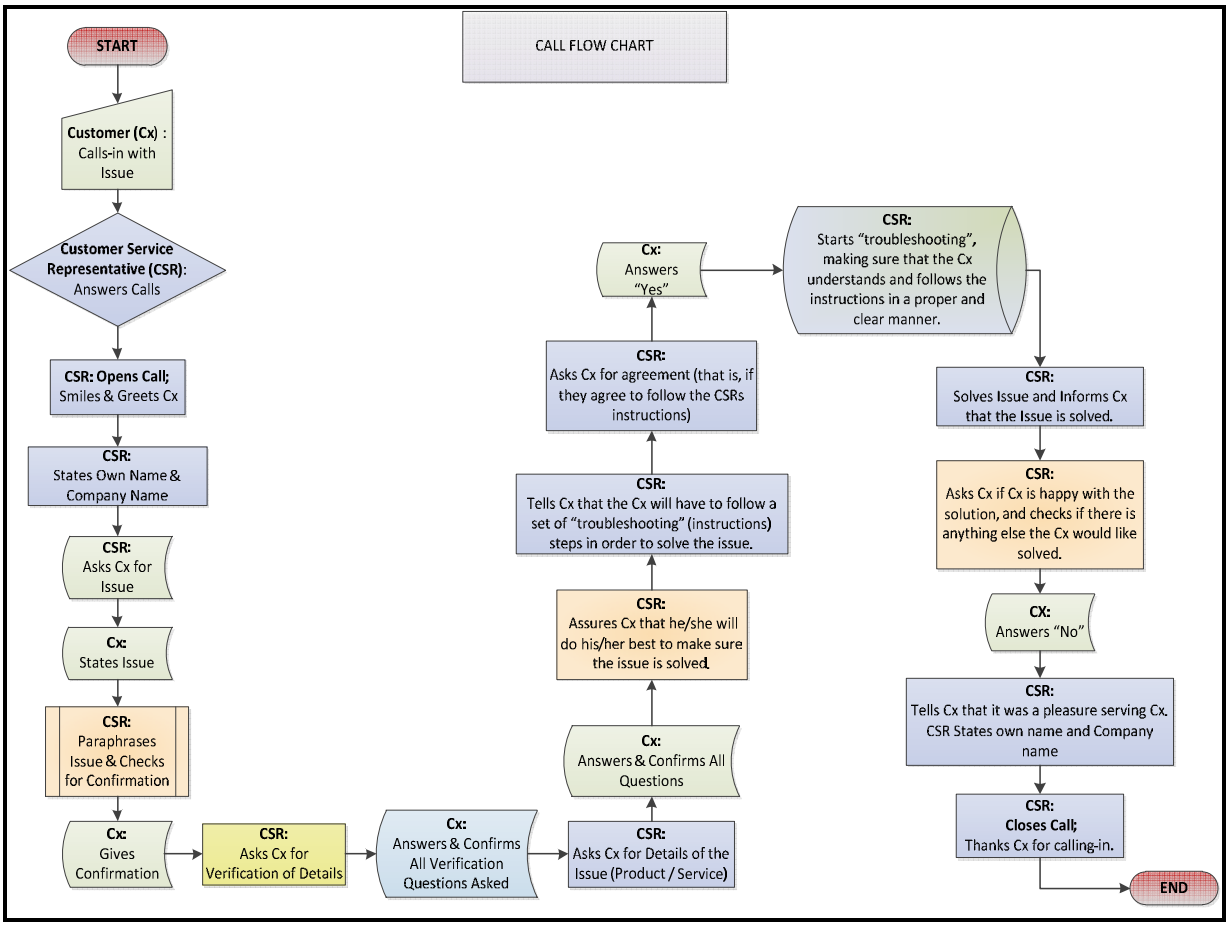
   - "Please click on the ……..at the bottom ……..of your …… you will see a …… on the ……..of the……."
9. **Inform** customer of solution, and ask customer for permission to document result.
   - "I would like to inform you that the issue you called us for…… has been solved. I'd like your permission to record this interaction as resolved."
10. **Clarify** "Is there anything else?"

    - "May I help you with anything else?"
    - "Do you have any additional questions, Sir/Ma'am?"
    - "Is there anything else I can help you with today, Sir/Ma'am?"

11. Standard **closing** (Include thanks, own name and company name)

    - "Thank you for calling…….. This was ……Good-bye."

- "Thank you for calling…… You were speaking to/with…… Goodbye."



The Call Flow Chart

Read the details of a role-play given below and make a note of the important points in your notebook.

Mock-Role-Play:

Situation: A customer is calling for assistance because he is unable to open the internet on his computer at home.
Solution: Helps customer to successfully move a file from his desktop to the documents folder.
Agent: Thank you for calling "Customer-Tech-Support". This is Jasmeet. How may I assist you?
Customer: Hi this is Sahil. I am one of C-T-S customers, and I'd like some help with this issue I am having. I have a file on the Desktop on my PC that I want to transfer it to the "documents" folder.
Agent: You want to move a file from your desktop to your documents folder? Sure, I can assist you with that. However, I will need to verify your account

information before we continue. May I have your first name and last name please?
Customer: Sure, it isSahil Shah.
Agent: Thank you. May I have your C-T-S account number please?
Customer: That is XYZ1234.
Agent: Thank you. Just to confirm that I have the right account, I see that the e-mail address on the account is Sahil.Shah@email.com, is that correct?
Customer: Yes, that's right.
Agent: Thank you for verifying your account Sir. I can now assist you with transferring your file to the "documents" folder on your PC. Are you in front of your PC now?
Customer: Yes I am.
Agent: Which operating system are you running on your PC, sir?
Customer: It is windows 7.
Agent: Alright, do you see the file on your desktop sir?
Customer: Yes, I do.
Agent: Please place the mouse cursor / pointer over the icon and click on the right button of the mouse. Do you see a menu poping up?
Customer: Yes.
Agent: Now click on the option Cut with the left mouse button.
Customer: Okay, I have done that.
Agent: Now click on the Start button, at the bottom right corner of your Desktop screen, and once the start menu opens, you will see a menu option "Documents" on the right side of the menu.
Customer: Yes, do I click on it?
Agent: Yes, Please. That should bring up the window for the documents folder.
Customer: Yes it did.
Agent: Position the cursor / pointer on the empty part of the window and click on the right button on the mouse and click on the option Paste.
Customer: Okay…yes. I see the file in this folder now. Thank you!
Agent: You are welcome sir. Before we end this call, I'd like to confirm that the issue you called us for, moving a file from the desktop to the documents folder is resolved.
Customer: Yes, that's right.
Agent: Thank you. I'd like your permission to record this interaction as resolved.
Customer: Sure, please go ahead.
Agent: Thank for choosing "Customer-Tech-Support", sir. Have a nice day.
Customer: Thank you. You have a nice day as well.

EXERCISE 1: Following a Call Flow

In your own words, fill in the responses for the agent in the role-plays below. You may take inputs from the previous section and the above given call flow chart but use your own language – DO NOT COPY / PASTE!!

Role-Play -1

Situation: A customer is calling to find out his bank account balance.
Agent Name: Tanish.
Company Name: Bank of Wealth
Solution: Agent informs customer how much money there is in the account
Agent:
Customer: I would like to know how much money I have in my account.
Agent:
Customer: Sure, it's HarshaRandwa. My account number is 012-345-9876-543
Agent:
Customer: The last three numbers of my password is ***.
Agent:
Customer: Oh, I thought I had one lakh, but fifteen thousand less is not bad either.
Agent:
Customer: That will be all. Thank you.
Agent:
Customer: Yes, that's right.
Agent:
Customer: Sure, please go ahead.
Agent:

Role-Play -2

Situation: A customer is calling in to order a Pizza.
Agent Name: Kushi.
Company Name: Tasty Kebabs
Solution: Place the order and offer the customer to upgrade their orders.
Agent:
Customer: I want to order kebabs for dinner, for the entire family. We are 12 of us, and we're all non-vegetarians. So, what would you suggest?
Agent:
Customer: Great! That sounds perfect. I'd like to order 4 sheekh kebabs, 4 murghhariyali kebabs, and 4 tandoori chicken kebabs!
Agent:
Customer: Yes. Please have it delivered to H – 1/23, Sector – 456, Faridabad (Haryana).

Agent:
Customer: Sure! 5 rupees per roti is very reasonable. Send 2 rotis per person. I'll just pay the bill in cash once it's delivered.
Agent:
Customer: 30 minutes? Very good!
Agent:
Customer: No. No. That's all! Thank you.
Agent:

EXERCISE 2: Present Continuous Tense

Read aloud the following and pick out the sentences which are in the Present Continuous Tense.

1. Nokia is a very large company that specializes in the production of mobile devices.
2. You are looking at a new model by Sony which has an external memory slot.
3. This phone is becoming popular day by day.
4. The iPhone is also great for using the internet.
5. APPLE is offering a 10% discount on all their products this Christmas.
6. Buying this product will also make you a member of our Premium Customer Group.
7. By becoming a member of this group, you are securing for yourself a 15% discount on all further purchases.

Go through the assessment. If time permits, you can try to attempt the exercise in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Read this:**

1. Meetika and I **are solving** the riddles.
2. One of my colleagues **is coming** to dinner tonight.
3. **Is** anyone **coming** to the dance show?

⊙**Instruction:** Fill in the blanks with the present continuous form of the words in brackets.

1. Keeping in mind the special brand name and image of our company, I _____ (prepare) a new advertisement for our products.
2. Ma'am, we _____ (launch) a new mobile phone, which will make dialing calls easier.
3. Sir, I _____ (offer) you the best price for this product because you are a valued customer.

4. This computer has a nice design; it _____ (go) to look great in your study-room.
5. If you _____ (look) for a computer that most artists use, then this is the one.
6. I have sold at least 50 such phones since morning. We_____ (run) out of stock now. These are the last three we have. So, if you like the design, you should buy one now.
7. A lot of stores charge far more money than we have offered. But we _____ (charge) less because you are a regular customer.
8. If you _____ (will) to buy them now, then we can offer you a 25% discount.
9. We _____ (search) for a new place to shift the office.
10. This is such a fantastic computer! You _____ (do) the right thing by buying it.

REVIEW SESSSION 5

The review evaluations will be **Question and Answer** and **Role-Play** based. Answers will be assessed on content, context, grammar, sentence structure and vocabulary based on the sessions 14, 15 and 16.

The review evaluation is divided into three parts. One for each session:

- Handling Customer Queries .
- Clarifying .
- The Call Flow.

ASSESSMENT

Review of Session-14: Handling Customer Queries

Questions:

1) *Answer the question in the "Questions" section as completely as possible, in your own words.*
    a. What should a customer service/sales representative (CSR) do when he/she is approached or called by a customer?
    b. What are the different ways a customer service/sales representative (CSR) may ask the customer if he/she can be of further assistance?
    c. What must a customer service/sales representative (CSR) do when a customer thanks them?
    d. What are the four important skills 'customer service/sales representatives' use when handling customers' queries? Explain in detail.
    e. *Complete the dialogues in Role-Play (by filling in the blanks) to form a conversation between a Customer (A) and a Customer Sales/Service Representative (B).*

Sentences:

1. **Customer:** "I bought a computer yesterday. Can I exchange it?"
   _____.
   CSR: "Yes Sir, you can, as it's only one day since you bought it."
   _____.
2. **Customer:** "Do you follow an exchange and refund policy?"_____.
   CSR: "We have a strict "no refund" policy."
   _____
   CSR: "You can exchange the item within a week of purchase, but only if the price tag is still in place

_____

_____

3. **Customer:** "Excuse me, could you tell me how long will you take to deliver my computer set to my house?"

_____

_____

CSR: "We will deliver it within two days, Sir."

_____

_____

4. **CSR:** "Can I help you, Ma'am?"

_____

Customer: "Yes, I lost my service-delivery number. Could you please give me the number again?"

_____

_____

CSR: "Sure, Ma'am. Just give me a minute."

_____

****

Review of Session-15: Clarifying

Questions:

1) *Answer the question in the "Questions" section as completely as possible, in your own words.*
    a) What are some of the common questions customer service representatives ask customers, to clarify what the customer wants or what the issue is?

Role Play

2) *Rearrange the sentences to form a conversation between a customer service representative and a customer.*

Role-Play 1:

CSR: Excellent choice, Ma'am/Sir! Could you please provide me with your phone number and postal address, in order for us to make a note of your details in our customer database?

Customer: Hi! Does your company sell Smartphones?

CSR: Very good. What is the price range you are looking at?

Customer: What's the difference between the Apple and Samsung?

CSR: Yes, we do. Which brand would you like to see?

Customer: Sure.

Customer: I think the best benefit of the Samsung Smartphone is that it fits right into my budget! I've decided to buy the Samsung Smartphone. Could you please make my bill?

CSR: Not much, except for the cost. The Smartphone by Samsung costs only Rs 27,000, whereas, the basic Apple Smartphone costs more than Rs 40,000! In fact, the Smartphone by Samsung has got as many features, advantages and benefits as the one by Apple.

CSR: Thank you. May I suggest the Samsung Smartphone?

Customer: In Apple, the 4-S and in Samsung, I'm not too sure.

CSR: We have the complete range of Apple and Samsung products. Is there any particular model you're interested in?

Customer: Rs 20,000 to a maximum of Rs 35,000. Not more.

Customer: Apple or Samsung.

CSR: Thank you.

Role-Play 2:

CSR: Now, could you please open a new word document, and type your name?

Customer: Okay, done.

CSR: Could you please check and let me know if the cable that runs from the keyboard to the central processing unit (CPU) tower, is fit in the socket properly?

Customer: Yes, exactly!

CSR: Can you tell me what the issue you're facing is?

Customer: Great! I can see my name. Thank you!

CSR: As I understand, whenever you type on the keyboard, the action does not translate itself on to the document, thus leaving the open page blank. Would that be correct?

Customer: Four days ago.

CSR: So your keyboard is not functioning properly. Am I correct?

Customer: It's a little loose.

CSR: Could you push it in the socket firmly?

Customer: When I type anything no words appear on the document. It remains empty.

CSR: Thank you. Could you tell me when did you first notice the issue?

Customer: Okay.

CSR: Could you please let me know what happens?

Customer: My keyboard is not working. I need one of your computer technicians to come and repair it?

CSR: Thank you.

Customer: Yes.

Sentences:

3) *Choose the correct question that should follow what the customer says.*

1. Customer: I would like a sell my laptop for 7,500 rupees.
   Your question:
   - When would you like to sell it?
   - How old is the laptop?

2. Customer: I would like to buy a mobile phone.
   Your question:
   - What kind of phone would you like to buy?
   - Is there any particular brand of phone that you would like to see?

3. Customer: Could you show me a pair of speakers please?
   Your question:
   - Sure! Are you looking for a specific brand or model?
   - Sure! Can you look for me any particular brand or model?

4. Customer: I need some educational CDs on Science and Math.
   Your question:
   - Shall you want CDs for five sciences only?
   - Would you like one Cd for each subject?

5. Customer: I need to exchange this phone. It hasn't been working from the day I bought it!
   Your question:

- Oh, that's too bad! Do you want to buy another phone in exchange?
- I'm so sorry for the inconvenience caused. Could you please provide me with the Bill you had received when you had bought the phone?

6. Customer: I like the phone but I don't like the color.
   Your question:
   - This phone comes in five different colors. Would you like to take a look at them?
   - This phone comes in five different colors. What you would like to take a look at?

7. Customer: I am looking for the Apple iPhone.
   Your question:
   - We have all of them. What one do you want?
   - We have all of Apples' iPhones. Which one would you like to see?

8. Customer: I saw a pair of speakers here last week – can you please find that for me?
   Your question:
   - Where was the brand or model of the speakers?
   - What was the brand or model of the speakers?

9. Customer: Can you show us a computer?
   Your question:
   - Should I show you a desktop or a laptop?
   - How I show you a desktop or a laptop?

10. Customer: I want to buy a computer for my niece. Could you help me out?
    Your question:
    - Why are you looking for something in particular?
    - Are you looking for a particular type of computer?

****

Review of Session-16: The Call Flow

Questions:

1) *Answer the question in the "Questions" section as completely as possible, in your own words.*
   a. What does the 11-point Call Flow Plan Focus on?
   b. What are the 11 steps of the 11-point Call Flow Plan?
   c. Explain each step of the Call Flow Plan. Give an example for each step.

d. Which step decides whether the call will proceed or not?

Sentences:

2) *Fill in the blanks with the Present Continuous form of the words in brackets.*

a. Keeping in mind the special brand name and image of our company, I _____ (made) new user manuals for all our computers.
b. This is such a fantastic computer! You _____ (do) the right thing by buying it.
c. We _____ (launch) a new Smartphone, which will make storing data easier.
d. A lot of companies _____ (charge) far more money for a computer than we do.
e. We _____ (offer) a 40% discount for the newly launched Smartphone to our first 100 customers.
f. This computer has a nice design; it _____ (go) to sell like hot-cakes!
g. If you _____ (look) for a store that sells computers at the best prices, then you've come to the right place!
h. We have sold at least 120 laptops today. We_____ (run) out of stock now. These are the last three we have.
i. If you _____ (will) to buy them now, then we can offer you a 30% discount.
j. I _____ (search) for the customer service report.

****

SESSION 17: GIVING AND RECEIVING FEEDBACK

RELEVANT KNOWLEDGE

Read aloud the following sentences:

1. You did a good job!
2. You need to improve your performance.
3. You have improved a lot.
4. You have done well.
5. You should try harder.

Such comments are issued when you:

(a) Are happy with someone's performance at work.

(b) Feel that someone needs to work harder.

Decide for each point, whether the feedback belongs to option (a) or to option (b).

For each feedback, how would you respond? Write your answers.

1. _____.
2. _____.
3. _____.
4. _____.
5. _____.

There are some basic guidelines that are followed while giving or receiving feedback. These are:

Guidelines for giving feedback:

- **Express your feedback in positive terms.** For example, 'It would have been helpful if you had emailed the location and starting time for the meeting to everybody" rather than "How do you expect us to meet if you don't tell us the time and location".
  Being positive gives an opportunity for agreement, being negative is more confrontational.
- **Be descriptive rather than evaluative.** For example, "You didn't bring the notes to the meeting, which you agreed you would" rather than "You are lazy and unreliable".
  Describing what you see and hear reduces the need for others to react emotionally.
- **Reveal your own position or feelings.** For example, "I felt unsettled when you argued your point" rather than "You were very rude".
  Describing your reaction gives the person an opportunity to think and respond to the feedback.
- **Be specific rather than general.** For example, "When you spent forty minutes trying to find my account details in your records, I lost some of my confidence" rather than "You and your company are disorganised".

- **Feedback is usually more effective when requested** than when given voluntarily.
- **Generally, feedback is most useful at the earliest opportunity** after the given behaviour.
- **Check that you have communicated your feedback clearly.** Ask the person to rephrase your feedback to see if it corresponds closely to what you intended.

Guidelines for receiving feedback:

- Listen to the feedback. Try to understand the other person's perspective.
- There is nothing called “negative” feedback. All feedback is always positive; only the attitude of the person can be negative.
- Focus on “only” what you need to learn from the feedback.
- Don’t reject feedback immediately. Give the feedback serious consideration and weigh up the consequences of changing or not changing. Don't reject it immediately.
- Express your thoughts and feelings about the feedback and possible changes.
- Tell the person whether you intend to try and change, and in what ways.
- Tell the person what they could do to help you make changes.
- Express appreciation for their concern and interest. 'Thank you for the feedback' or 'Thank you for the ideas'.

EXERCISE 1: Giving and Receiving Feedback

Fill in the blanks with appropriate feedback and responses:

- I will work harder.
- Thank you for the feedback, Sir/Ma’am.
- You have to learn how to work in a team.

1. A: I have reviewed your performance.
B: How did I do, Sir/Ma’am?
A: You do well alone but not when you are working in a team. _____.
B: Thank you for the feedback, Sir/Ma’am. I will work on it.

2. A: How do you find work at our office?
B: I like working here, Sir/Ma’am.
A: I would like to give you a feedback. You have done very well till now.
B: _____.

3. A: I would like to give you a feedback.
B: Okay, Sir.
A: As a sales representative, you need to be more attentive to the customers.

B: Thank you for the feedback, Sir/Ma'am._____.

EXERCISE 2: Reported Speech

The following sentences are in the Direct Speech. Choose the option which is in the corresponding reported speech.

1. The supervisor to Reena: "You are doing well."
   (a) The supervisor told Reena she was doing well.
   (b) The supervisor told Reena you are doing well.
   (c) The supervisor told Reena she were doing well.
2. Reena to the supervisor: "Thank you, Ma'am."
   (a) Reena told the supervisor thank you.
   (b) Reena said thank you Ma'am.
   (c) Reena thanked the supervisor.
3. The supervisor to Reena: "You need to improve."
   (a) The supervisor told Reena she needs to improve.
   (b) The supervisor told Reena she needed to improve.
   (c) The supervisor told Reena you need to improve.
4. Reena to the supervisor: "I will work harder."
   (a) Reena told the supervisor she would work harder.
   (b) Reena told the supervisor she will work harder.
   (c) Reena told the supervisor I will work harder.
5. The supervisor to Reena: "You will get a feedback."
   (a) The supervisor told Reena you will get a feedback.
   (b) The supervisor told Reena she would get a feedback.
   (c) The supervisor told Reena she will get a feedback.

Go through the assessment. If time permits, you can try to attempt the exercise in class. Otherwise, you can attempt it at home and bring to the class the next day for review.

ASSESSMENT

⊙**Read this:**
Examples:
Direct speech: Linda: "Ayesha, you are looking great."
Reported speech: Linda told Ayesha that she was looking great.

Direct speech: Ayesha: "Thanks for the compliment, Linda."
Reported speech: Ayesha thanked Linda for the compliment.
⊙**Instruction:***Change the parts in bold to reported speech.*

1. Manager: "Saroj, **you have done well!**"
   _____.
   Saroj: "Thank you, Sir!"

2. Manager: “You need to be more attentive to your customers.”

   _____.

   Saroj: “Yes, Sir. **I will try harder.**”

   _____.

3. Manager: “**You have to learn how to work in a team.**”

   _____.

   Saroj: “Yes, Sir**. Actually this is the first time I am working as a part of a team.”**

   _____.

   Saroj: “However, **I will give it my level best.**”

   _____.

4. Manager: “Saroj, **I am happy to see that you are improving.**”

   _____.

   Saroj: “Thank you, Sir.”

   Manager: “**How do you like working in this office?**”

   _____.

   Saroj: “Sir, **I like the office very much as it provides opportunities for moving ahead.**”

   _____

   _____.

REVIEW SESSSION 6

The review evaluations will be **Question and Answer** and **Role-Play** based. Answers will be assessed on content, context, grammar, sentence structure and vocabulary based on the session 17.

The review evaluation consists of one session: Giving & Receiving Feedback

ASSESSMENT

Review of Session-17: Giving and Receiving Feedback

Questions:

1) *Answer the question in the "Questions" section as completely as possible, in your own words.*
   a) What kind of feedback do you give when you are happy with someone's performance at work? State examples.
   b) What kind of feedback do you give when you feel that someone needs to work harder? State examples.
   c) How should someone respond to following feedback? Fill in the blanks with the appropriate responses.
      - "You did a good job!"- _____.
      - "You need to improve your performance." _____ _____.
      - "You have improved a lot." _____ _____.
      - "You have done well." _____.
      - "You should try harder." _____.
   d) What are the different guidelines for giving feedback? Give examples that describe each guideline.
   e) When is feedback more effective?
   f) When is feedback most useful?
   g) How will you know if your feedback has been understood clearly?
   h) What are the guidelines for receiving feedback?

Role Play

1) *Fill in the blanks with the appropriate feedback and responses, in order to form a coherent conversation between "**A**" & "**B**".*
   a) I will work harder.

b) Thank you for the feedback, Sir/Ma'am.
c) I could see the amount of effort you'd put into your work, and I really think you will be very successful if you keep up the good work.
d) You have to learn how to work in a team.
e) Thank you so much for your feedback. I assure you, I will continue to do well.

1. A: I have reviewed your performance
   B: How did I do, Sir/Ma'am?
   A: You do well alone but not when you are working in a team.
   _____
   _____.
   B: Thank you for the feedback, Sir/Ma'am. I will work on it.

2. A: How do you find work at our office?
   B: I like working here, Sir/Ma'am.
   A: I would like to give you a feedback. You have done very well till now.
   B:_____
   _____.
   A: I went through your report this morning.
   B: Was it okay. I'd collected all the data I could get.
   A: I'd like to give you some feedback that may help you.
   B: What is it?
   A: _____
   _____.
   B:_____
   _____.

3. A: I would like to give you a feedback.
   B: Okay, Sir.
   A: As a customer service representative, you need to be more attentive to the customers.
   B: Thank you for the feedback, Sir/Ma'am._____
   _____.

Sentences:

2) *Convert the direct speech of the given **sentences** to reported speech by filling in the blanks..*
   - Manager: ***"Sahil, your presentation was very good!"***
     _____
     Sahil: "Thank you, Sir!"

- Team Leader: ***"Trisha, you need to be more focused on your work."***

  _____.

  Trisha: ***"Yes, Sir. I will try harder."***

  _____.

- Manager: ***"You have to learn how to work in a team."***

  _____.

  Sahil: ***"Yes, Ma'am. Actually this is the first time I am working as a part of a team."***

  _____.

- Manager: ***"How do you like working in this office?"***

  _____.

  Sahil: ***"Sir, I like the office very much as it provides opportunities for moving ahead."***

  _____.

- Team Leader: ***"Trisha, I am happy to see that you are improving."***

  _____.

  Sahil: "Thank you, Sir."

****

COMMUNICATION SKILLS

SESSSION 17: IMPORTANCE OF COMMUNICATION SKILLS

This section on communication skills has the following topics:

- Importance of communication skills.
- Effective listening skills.
- Non-verbal communication.
- Workplace communication.
- Interview skills

This section focuses on a few of the soft skills that you need as you move from school to the workplace. Hence, you will find that the exercises and activities are different from the previous section on English. Listen carefully to your facilitator to make the most of this section.

RELEVANT KNOWLEDGE

What Is Communication?

Communication is more than just talking; it requires understanding the information that has been exchanged. If you cannot understand what has been expressed, then the communication has not been not successful. For example, you can explain to someone how to multiply a complicated equation, but if they don't understand your explanation, then your communication was not successful.

Many actions are involved with communication:

- speaking clearly,
- listening effectively,
- asking questions,
- understanding body language,
- using a common language,
- organizing information,
- understanding (this is the most important aspect).

We want the students to not only improve their language skills, but also improve the way they speak with other people to ensure that the thoughts are conveyed and understood correctly. This will be important when they move into the working environment, and interact with and are exposed to different people. They might meet people who don't listen well or cannot communicate effectively, causing misunderstandings.

Misunderstandings can create many problems. Hence it is important for students to improve their communication skills in order to avoid misunderstandings and improve the likelihood of positive outcomes with everything they do.

Our understanding of communication is incomplete till we understand the flow:

Sender -> Message ->Receiver ->Feedback-> Sender

Communication is an ongoing process and does not end with receiver receiving the message. Feedback is a very important component of this process.

Message is not just what a person says, but also the meaning of that message. Meaning takes more than one form. That is, it can be the meaning(s) as intended by the sender and the meaning(s) as interpreted by the receiver. Sometimes, the sender may have more than one meaning and/or the receiver may understand more than one meaning.

Feedback is the way the receiver lets the sender know she or he got a message and the way the sender finds out if the receiver correctly understood the message.

WORKSHEET - EFFECTIVE COMMUNICATION

Answer the following questions in your own words based on your experiences and learning from today's session.

1. What do you think about the communication model?

2. Have you ever had difficulty sending a message? What happened? Why is it sometimes difficult to say what we really mean?

3. Have you ever tried to communicate and been misunderstood? What happened? What could you have done differently?

4. What happens when communication breaks down between you and your friends?

Case Study- Communication is the savior

The following is a true story that took place on a small fishing island off the coast of Sri Lanka at the time of the Tsunami. The son of one of the fishermen was in Singapore, watching news about the earthquake that had just occurred off the coast of Indonesia. Worried about the potential impact on his family of giant waves that were reported to be spreading across the Indian Ocean, he telephoned his sister in Nallavadu, who told him that water was already beginning to seep into her home. He told her to leave immediately, and to urge others to do so. The villagers broke into the telecommunications centre. Using the public alert system set up for weather forecasts, they told the 500 families in the village that they had to leave immediately. The result of the warning was that although 150 houses and 200 boats were destroyed, not one of more than 3,500 villagers lost their lives.

What does this story tell us? Discuss with your class fellows.

SESSSION 18: EFFECTIVE LISTENING SKILLS

RELEVANT KNOWLEDGE

What are Effective Listening Skills?

Expressing our wants, feelings, thoughts and opinions clearly and effectively is only half of the communication process needed for interpersonal effectiveness. The other half is listening and understanding what the other person is communicating to us. Effective communication exists between two people when the receiver comprehends, interprets and understands the sender's message in the same way as the sender intended it. It has many advantages.

By listening effectively, you will:

- Get more information from the people
- Increase others trust in you
- Reduce conflict
- Better understand how to motivate others
- Inspire a higher level of commitment in the people you manage

Effective listening is actively absorbing the information given to you by the speaker, showing that you are listening and are interested in what he/she is saying, and giving feedback to the speaker so that he/she knows that the message was received. It makes the speaker feel special and paid attention to.

Active Listening

Active listening is an intent to "listen for meaning", in which the listener checks with the speaker to see that a statement has been correctly heard and understood. The goal of active listening is to improve mutual understanding.

When interacting, people often do not listen attentively to one another. They may be distracted, thinking about other things, or thinking about what they are going to say next. (The latter case is particularly true in conflict situations or disagreements).

Active listening is a structured way of listening and responding to others. It focuses attention on the speaker. Suspending one's own frame of reference and suspending judgment are important in order to fully attend to the speaker.

Techniques:

- Focus on the speaker.
- Watch for non-verbal cues. These may be more important than what is said.
- Listen to how something is said. Inflection, intonation and strength of the speaker's voice may communicate more than words alone.

- Eliminate distractions.
- Give encouraging non-verbal cues. Nodding and leaning toward the speaker show interest.
- Encourage the speaker by using words such as, “Yes,” “I see,” and “go on”.
- Ask questions to clarify what is said.
- Check your understanding by repeating or paraphrasing what you think you heard.
- Respond when appropriate.
- Control emotional responses.
- Listen to the entire point without interrupting.
- Give the speaker time to think as well as talk.
- Summarize what was said.

Your facilitator will guide you through the session. Listen to him/her carefully and follow all instructions.

EXERCISE: CHECK YOUR LISTENING SKILLS

Name: _____

Directions: Start in the United States and follow the directions to see where you end up.

1. Write down: THE UNITED STATES OF AMERICA
2. Take out all of the E’s.
3. Take out every fifth letter.
4. Change the F to an A.
5. Move the S’s to the front of the word.
6. Take out all of the T’s.
7. Take out the first vowel (A, E, I, O, U) and the last consonant (alphabets other than the vowels).
8. Move the fourth and fifth letter to the end of the word.
9. Replace the S’s with L’s.
10. Remove the sixth, seventh, and eighth letters.
11. Move the double L’s to be the third and fourth letters.
12. Where did you end up? _____

SESSSION 19: NON-VERBAL COMMUNICATION

RELEVANT KNOWLEDGE

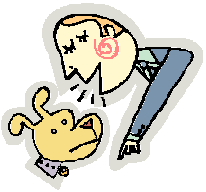
What is Non Verbal Communication?

Our Communication comes from three sources. These are listed below:

Words	7%
Tone	38%
Gestures, Body Language	55%

Nonverbal communication is behavior, other than spoken or written communication, that creates or represents a meaning. In other words, it includes facial expressions, body movements, and gestures. Nonverbal communication is talking without speaking a word. It is very effective, maybe even more so than speech.

Remember the saying, **"Actions speak louder than words".**



You may be surprised to know that it is not only humans who respond to this form of communication. If you have a pet, especially a dog, it may follow directions and respond to hand and body movements more than your words. Dogs will even get confused if you say "sit" but give the hand motion that you usually use for "stay".

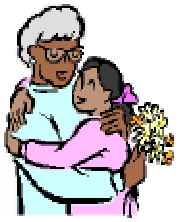
Next, we will focus on different kinds of nonverbal communication and its usage. One form of nonverbal communication is called the **"universal gesture".** See if you can guess what it is by the time you finish this page!

There are ***two main types*** of nonverbal communication: Body Language and Gestures.

Body language: Body language is body movements that depend on a person's attitude or feelings. Body language includes the way people walk, how they stand, and their facial features. In other words, any kind of meaning that is shown by a person's body attitude or movements. For example, when a boy is sad he may drop his head and walk slowly. Or, if a girl is happy, she might run and jump or stand up straight and put her hands in the air. People don't have to say anything to show how they feel about things. The color of people's skin may even show how they feel. For example, if people with light colored skin get embarrassed, their skin may turn red, or if they are worried, they might get pale. Body language can be voluntary (on purpose) or involuntary (a person can't help it). An interesting fact is that blind children will smile when happy even though they have never seen a smile.

Gestures: Gestures are communications like facial expressions, hand signals, eye gazing, and body postures. Examples include smiles, handshakes, waving, and raising certain fingers to say something. For instance, if you see a friend at a noisy carnival, you might smile and wave at your friend. You might also point at theFerris wheel if you wanted to meet your friend there. You could do all of these things without saying a word. Another great example is in cricket the umpire has different hand signals for showing if the batsman is out or if he has hit four or six runs.

There are ***three main uses*** of nonverbal communication. People often use all of them every day.



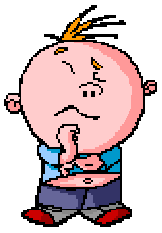
The first use is for ***greetings***. Greetings include waves, handshakes, hugs and salutes. For example, when you see your friends in the morning on the way to school, you may wave to them. A more formal greeting would be shaking hands with your boss at work. The salute is used in the armed forces when you see a person with a rank higher than yours.

The next use is for ***specific communication***. For example, workers may use signals at their jobs. One important use is in construction when a worker signals to a crane operator to keep everyone safe. These signals are very specific and tell the operator to move left, right, or raise and lower the hook. Another very important use is sign language. This form of communication is used for people who have hearing problems. They use hand signals and lip reading to communicate very specific things.



The third use is ***involuntary nonverbal communication***. These are movements and attitudes that show how people feel. Most times, people don't even know they're communicating when they make these actions, because these actions are automatic. For example, a slumped posture may mean that the person is sad. A stern look may show that the person is in a serious mood. When people rub their eyes, it can show they are tired. All of these examples show how people feel.

Note: Expressions and gestures are not the same around the world. Some gestures, like the “thumbs up,” which is a positive gesture in the United States, may mean something very different in other cultures. In Nigeria, the thumbs up gesture is a rude insult! In Australia it is an obscene insult. Another funny example is spinning your finger around your ear. This is known as the “you’re crazy” sign in America and in some other nations. But in Argentina, it means “you have a phone call!”



Another gesture that can be taken completely differently depending upon where you live is nodding the head. In most parts of the world, it is a positive or “yes” gesture. In Bulgaria, and parts of Greece and the Middle East, it means no.

Other examples of involuntary communication are rubbing hands together to show anticipation, tapping or drumming fingers when impatient, biting nails if nervous, and putting a hand or finger to one's cheek if thinking deeply.

Non verbal communication includes, Proxemics- how we use our personal space, eye contact or gaze, facial expression, gesture, especially use of hands and arms, dress, posture, paralanguage – sounds that we make e.g., uff, hmmm, etc. Carefully study the handouts on nonverbal cues given in this session.

NON VERBAL CUES

- Facial expressions
- Body language
- Eye contact
- Dress and physical appearance
- Gestures

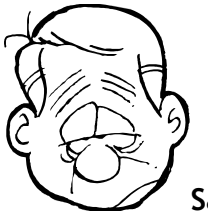


When our words send one message and our nonverbal cues send another message, people

---

Most People Express and Can Recognize

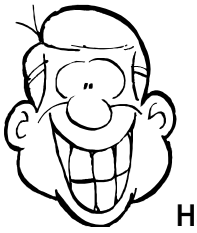
Six Basic Emotions



Sadness



Anger



Happiness



Surprise



Disgust



Fear

WORKSHEET NON VERBAL CUES AT WORKPLACE

Answer the questions based on the scenario given:

#1

Damanjit was complaining about the work he had to do on the job. His supervisor, Mr. Ritesh, looked at him crossed his arms and frowned.

1. What is the inappropriate behavior?

_____

2. What are the non-verbal cues?

_____

3. How should Damanjit correct the behavior

_____

#2

Julie is very friendly with Koel on the job. She always jokes with Koel and helps Koel do her work. She doesn't really talk to anyone else. She never helps other workers. When she does talk to other workers, like Suraj they often turn away and ignore her.

1. What is the inappropriate behavior?

_____

2. What are the cues?

_____

3. How could he correct the behavior?

_____

#3

Jay is a great worker at Coffee Day. He's young and has an unhappy family life, but he does a good job for you. He always has a frown on his face though. When customers ask him for an extra napkin or coffee, he always gets it for them, but he scowls and shrugs while he's doing it. So, the customers are left feeling like they have been an inconvenience to him. He also walks around looking at the floor with his shoulders slouched down. You would think he didn't like himself very well.

1. What is the inappropriate behavior?

_____

2. What are the cues?

_____

3. How could he correct the behavior?

_____

#4

Sohini works at a cyber cafe. She knocks into things and uses quick, jerky motions. She often touches people while she talks to them and puts her hands on their shoulders.

What is the inappropriate behavior?

_____

What are the cues?

_____

How could she correct the behavior?

_____

SESSSION 20: WORKPLACE COMMUNICATION

RELEVANT KNOWLEDGE

What is workplace communication?

In the workplace, the learners will meet a variety of communication styles. They may need to understand how language can mean different things to different people. They need to know how to communicate directly and to clarify expectations.

Workplace Communication Skills

There are two types of communication; formal and informal. Informal communication is between family and friends, but when it comes to formal communication, there are some etiquette and rules that need to be followed. Here are some tips for effective communication in the workplace with your subordinates, colleagues, as well as seniors.

- **Be Clear and Transparent:** You need to be very clear and transparent in the way you communicate, especially at work. Avoid statements that may be dubious or with a double meaning. Whatever you communicate, be it any changes in the rules, regulations or policies, everything should be explained properly and clearly with examples.
- **Be Well Prepared:** Remember this is professional communication, so you should always have a proper documentation of all the points to be covered while communicating with your employees or colleagues. Include everything that you want to communicate, as missing out on even a single important point might create a hassle later on.
- **Be Precise:** You are here to communicate about organizational matters, and so you need to honor the time of everyone involved directly or indirectly. For this, you have to be precise. So do not drag the discussion unnecessarily and come to the point directly.
- **Be Generic:** Communicating on a professional level needs discussion on a generic level. Pointing at anyone's mistakes or errors is undesirable, as this might result in a conflict. Use the word 'We' for success as well as failures, and try not to use the word 'You' unless there is a need for mentioning something specifically.
- **Be Assertive:** Communicate in an assertive manner. It should be such that you, as well as the person in front of you should be benefited. Be open and honest about what you say, while respecting the feelings of others.

- **Do Not Assume:** Never work with any assumptions, at least as far as communication is concerned. For example, if there is a set of tasks that need to be performed, make sure you specify all of them along with the end result, and do not assume that everyone involved will know most of the things needed to be done anyway.
- **Encourage Two-Way Communication:** Always give the other party a chance to speak. Ask questions and take the other person's opinion too, once you have finished speaking. Such a two-way conversation forms the basis of a healthy communication, and you also come to know about people's thoughts about certain issues. Moreover, you never know who might come up with a great idea and that too when least expected.

Effective non-verbal communication

A Mullah Nasruddin Story:

A renowned foreign scholar and his team members were passing through the town where Mullah Nasruddin lived. The scholar was honored by the ministers of that town. During this ceremony the foreign scholar said he wanted to have an intellectual discussion with the knowledgeable person in the city.

The ministers wanted to have some fun, so they immediately summoned their Town Jester – the "wise fool" – Mullah Nasruddin. As the news spread, a large crowd gathered to witness the "battle of wits".

The foreign scholar did not speak the local language and the rustic Nasruddin could not understand or converse in the foreign scholar's language. So, the two wise men tried to communicate with each other non-verbally in sign-language, while the audience looked on with fascination. The foreigner, using a stick, drew a large circle on the sand. Mullah Nasruddin took the stick and divided the circle into two. Then the foreigner drew a line perpendicular to the one Nasruddin had drawn and the circle was now split into four quarters.

He motioned to indicate first the three quarters of the circle and then pointed to the remaining quarter. In response to this Mullah Nasruddin made a swirling motion with the stick on the four quarters. Then the foreigner made a bowl shape with his two hands side by side, palms up, and wiggled his fingers.

Nasruddin responded by cupping his hands palms down and wiggling his fingers. The foreign scholar then bowed his head in deference before Mullah Nasruddin. Mullah Nasruddin smiled at the foreign scholar and then he walked away.

Later the renowned foreign scholar explained the intellectual encounter to the city council. "Mullah Nasruddin is truly a very learned man," the foreign scholar said, "I told him that the earth was round and he told me that there was the equator in the middle of the earth. I told him that the three quarters of the

earth was water and one quarter of it was land and he said that there were undercurrents and winds. I told him that the waters warm up, vaporize and move towards the sky, and in reply to that, he said that they cool off and come down as rain."

Later, when he reached home, his wife was curious, so Mullah Nasruddin explained his version of intellectual encounter: "This stranger has real good taste. He said that he wished there was a large round tray of halwa (milk cake). I said that he could only have half of it. He said that the syrup should be made with three parts sugar and one part honey.

I agreed and said that they all had to mix well and blend properly. Next he suggested that we should cook it on blazing fire. To this I suggested that we should pour crushed nuts on top of the halwa." "It was a very rewarding discussion," said Nasruddin with a glow of self satisfaction, "and I am so proud that I taught the foreign scholar the best recipe for halwa for which he will be grateful to me forever."

SATURDAY SHIFT- DIALOGUES

Mr. Ramakrishna- It looks like we are going to have to keep the production line running on Saturday.
Mr. Banerjee – I see
Mr. Ramakrishna – Can you come in on Saturday?
Mr. Banerjee - I think so.
Mr. Ramakrishna –That will be a great help.
Mr. Banerjee – Yes, Saturday is a great day for me, did you know that.
Mr. Ramakrishna - How do you mean?
Mr. Banerjee – It is my son's birthday.
Mr. Ramakrishna – How nice. I hope you all enjoy it.
Mr. Banerjee - Thank you very much for your understanding.

WORKPLACE SCENARIOS

Read the scenarios given below and discuss the questions that follow with your class:

1. Chetna works as a customer relation officer at a famous beauty clinic. She's rude and doesn't look at people when she talks to them. When she seats them, she tosses the menus on the table and walks off as though she is in a hurry and angry. She does not make the people feel welcome.

a). What is the inappropriate behavior?

_____

_____

b). What are the cues?

_____

_____

c). How could the behavior be corrected?

_____

_____

2. Chetan works as IT support officer in a college. He usually slumps and holds his head down. He often shrugs and frowns when someone speaks to him.

a). What is the inappropriate behavior?

_____

_____

b). What are the cues?

_____

_____

c). How could he correct the behavior?

_____

_____

SESSSION 21: INTERVIEW SKILLS

RELEVANT KNOWLEDGE

What are Interview Skills?

Prepare for your interview.

When you get selected for an interview you need to ask yourself - what was there in your CV or application form which interested the employer? Those being interviewed probably have similar skills and achievements, so you need to show that you are the right and the best match. To prepare yourself, check the company website, read the company literature (if any) and find out as much as you can about the organization.

Remind yourself about the contents of your application form/CV.

A valuable tool you need to prepare is a statement about yourself so you can answer the key question which is often asked – 'Why are you applying for this job?' So practice talking about your own self by preparing a 'Career Statement'. Can you list two or three things you are good at? Can you list two or three skills and combine them all into a sentence or two?

Make sure you know exactly where the interview is taking place. The building may have several floors so you need to allow time to get to the right floor. Plan your route – how long will it take to get there? You need to allow time for problems with transport, parking, bad weather etc.

Do you know who will be interviewing you? This is not essential but it may give you some idea about their focus.

Dress for success

You also need to prepare in advance, what you are going to wear. What you wear does not have to be new, but it does have to be clean and neat. Dress smartly in an outfit which is comfortable to wear and fits well. It is probably preferable to wear a suit of a dark, plain color and men could wear a tie. Women can wear a skirt or smart trousers with a coordinating jacket or a traditional saree/salwarkameez. Your shoes should be comfortable and clean. Your hair should be neat and remember to keep jewellery to a minimum. Your visual appearance is very important and you want to make the right impression. Looking good will also boost your confidence.

Typical interview questions

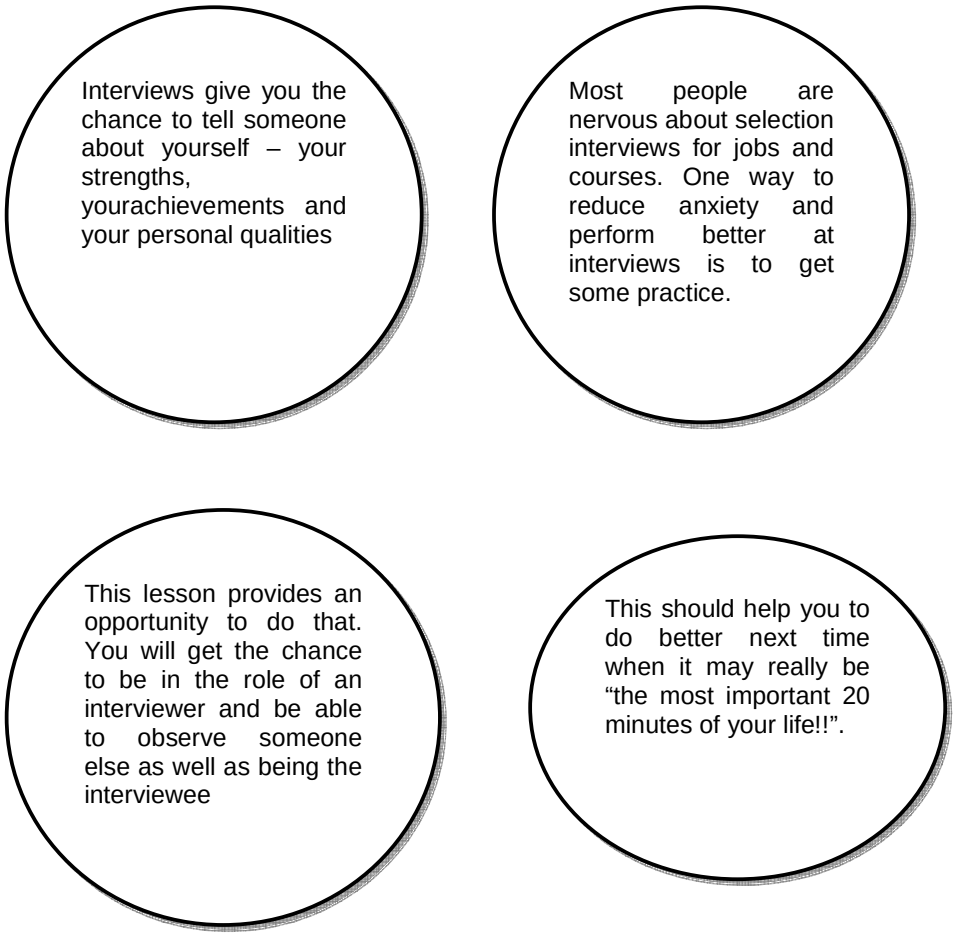
Prepare yourself for answering some questions that are typically asked in every interview. You could use some concepts you have learnt in your Level 1 text

book while preparing your answers. Most importantly, remember to be natural while giving your answers.

- Tell me about yourself
- Why have you applied for this job and applied to this company?
- What evidence can you offer that demonstrates you have the skills we are seeking?
- Can you give me an example of a problem you have solved?
- Why did you choose your particular degree?
- What are your strengths and weaknesses?
- Where do you see yourself in five years' time?
- What do you do in your leisure time?

INFO SHEET (1)- Interview Techniques

"This could be the most important 20 minutes of your life"



INFO SHEET (2) - Interview Techniques

JOB SPECIFICATION

The company requires an enthusiastic youth who can work as a Customer Care Executive with a leading Gym in Delhi.

The person must be able to work as part of a team, be a good communicator, and be prepared to work flexible hours, be smart in appearance, have a keen interest in physical fitness and be committed to our training program.

Qualification- Passed Class 12 (desirable but not compulsory)

**INTERVIEWER is the manager of the gym*

INFO SHEET (3) - INTERVIEW TECHNIQUES



PREPARATION

- Decide what to wear, be clean and tidy.
- Plan the journey including how long the journey will take.
- Find out about the company.
- Prepare some questions.
- Prepare some answers

THE INTERVIEW

- Arrive 10 minutes early.
- Be friendly and cheerful to the secretary or receptionist who greets you.
- Look neat and clean.
- Be prepared to shake hands.
- Don't sit until you are offered a chair.
- Try to relax and listen to the questions carefully.
- Look at the person asking the question.
- Think before you answer.
- Speak clearly and in a strong voice.
- Show interest and enthusiasm.
- Be honest.

INFO SHEET (4) - INTERVIEW TECHNIQUES

Interviewee's Checklist Continued

QUESTIONS YOU MAY BE ASKED

- Tell me about yourself.
- Why do you want the job?
- What makes you think you would be good at the job?
- What do you do in your spare time?
- What qualities do you think you have to offer?
- How did you like school?
- What are your strengths and weaknesses?

QUESTIONS WHICH YOU MAY ASK

- During the interview the details of the job will probably be explained to you, but there may be gaps and you may wish to ask your own questions. Wait until the end of the interview to ask questions and don't ask too many.
- What are the normal hours of work?
- What training will I get?
- Are there any opportunities for promotion?
- Who will I be working with?
- Who will I be directly responsible to?

WHAT WILL THE EMPLOYER NEED TO KNOW?

- What qualifications you have to offer.
- What experience you have including work experience.
- The standard of your health.
- Whether you are keen, interested and willing to work.
- Whether you have the skills, abilities and personal qualities for the job.
- Whether you have found out about the company beforehand.

INFO SHEET (5) - INTERVIEW TECHNIQUES



WHAT ARE THE CRITERIA THE INTERVIEWER WOULD USE IN THE SELECTION PROCESS?

- Qualifications.
- Work experience.
- Health.
- Home circumstances (e.g. distance from home to work).
- Skills/abilities.
- Personality.
- Interest and willingness to work.
- Knowledge of the company.
- Questions the candidate asks.

WHAT WOULD YOU TELL THE INTERVIEWEE?

- What they would be expected to do, who they would be responsible to.
- Wages, hours, holidays, lunch arrangements.
- Training offered.
- Future prospects.
- Values of the organization

ACTIVITY SHEET (1) – Interview Technique

Interviewee	Good points	Bad points
How is the interviewee sitting?		
What impression does this give?		
Is the interviewee prepared?		
Is the interviewee looking at the interviewer?		
Are the answers clear?		
What impression does the interviewee give? Confident, Nervous		
Does the interviewee show interest and enthusiasm?		
Are the questions easy/difficult?		
Were they relevant?		
Did the interviewee ask questions?		
Other comments:		

ACTIVITY SHEET (2) - Interview Techniques

1 Having taken part as an observer, interviewer and interviewee in today's session, list the skills, personal qualities or previous experiences you have which would be of value to a potential employer.

2 List any concerns you may have about your management of any interview situation.

3 Having watched or taken part in mock interviews, list the common weaknesses in an interviewee's performance

4 How could these be overcome?

5 List 8 key factors important to an employer in interviewing a potential employee.

1.
2.
3.
4.
5.
6.
7.
8.



SECTOR: IT-ITes

NSQF Level 4 (CLASS XII)

Student Workbook – Vol. 2

PSS Central Institute of Vocational Education, Bhopal

(a constituent unit of NCERT, under Ministry of Human Resource Development, Government of India)

Student Details

Student Name:_____

Student Roll Number:_____

Batch Start Date:_____

PREFACE

The National Curriculum Framework, 2005, recommends that children's life at school must be linked to their life outside the school. This principle makes a departure from the legacy of bookish learning which continues to shape our system and causes a gap between the school, home, community and the workplace.

The student workbook Volume 2 on "Productivity Tools" (Word processor, Presentation, Spreadsheet and E-mail) is a part of the qualification package developed for the implementation of National Vocational Education Qualification Framework (NVEQF), an initiative of Ministry of Human Resource Development (MHRD), Government of India to set common principles and guidelines for a nationally recognized qualification system covering Schools, Vocational Education and Training Institutions, Technical Education Institutions, Colleges and Universities. It is envisaged that the NVEQF will promote transparency of qualifications, cross-sectoral learning, student-centered learning and facilitate learner's mobility between different qualifications, thus encouraging lifelong learning.

This student workbook, which forms a part of vocational qualification package for students who have passed Class X or equivalent examination, was created by a group of experts. The IT-ITeS Skill Development Council approved by the National Skill Development Corporation (NSDC) for the IT/ITES Industry developed the National Occupation Standards (NOS). The National Occupation Standards are a set of competency standards and guidelines endorsed by the representatives of IT Industry for recognizing and assessing skills and knowledge needed to perform effectively in the workplace.

The Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), a constituent of National Council of Educational Research and Training (NCERT) in association with Wadhwani Foundation has developed modular curricula and learning materials (Units) for the vocational qualification package in IT/ITES sector for NVEQ levels 1 to 4; level 1 is equivalent to Class IX. Based on NOS, occupation related core competencies (knowledge, skills, and abilities) were identified for development of curricula and learning modules (Units).

This student workbook attempts to discourage rote learning and to bring about necessary flexibility in offering of courses, necessary for breaking the sharp boundaries between different subject areas. The workbook attempts to enhance these endeavors by giving higher priority and space to opportunities for contemplation and wondering, discussion in small groups and activities requiring hands-on-experience. We hope these measures will take us

significantly further in the direction of a child-centered system of education outlined in the National Policy of Education (1986). The success of this effort depends on the steps that school Principals and Teachers will take to encourage children to reflect their own learning and to pursue imaginative and on-the-job activities and questions.

Participation of learners in skill development exercises and inculcation of values and creativity is possible if we involve children as participants in learning, and not as receiver of information. These aims imply considerable change in school routines and mode of functioning. Flexibility in the daily time-table would be a necessity to maintain the rigor in implementing the activities and the required number of teaching days will have to be increased for teaching and training.

Acknowledgements

The following partners were instrumental in providing the content:

1. Accenture India's Corporate Citizenship Program (Skills 4 Life) has provided the content material for English and have commissioned and developed as well as provided access to their implementing partners (Dr. Reddy's Foundation and QUEST Alliance).
2. The Wadhwani Foundation team involved in designing and building this curriculum and content include Ms. Sonia Kakkar, Mr. Karthik Chandru, Ms. Rekha Menon, Mr. Ajay Goel and Mr. Austin Thomas.
3. The PSSCIVE"s team was involved in guidance and editing the content.
4. In addition, various public domain sources have been leveraged to create materials and illustrations across module. The contributions of all these sources is gratefully acknowledged and recognized.

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WORD PROCESSING

SESSION 1: CREATING TEMPLATES

Learning Objectives:

You have already learnt to create complex documents. You have also learnt to use fonts, styles, borders, images, clipart, font work etc to enhance the look and feel of the created document. You have also learnt to download and use templates. Now, in this book, you will learn about some advanced features of word processing software.

At the end of this session, you will be able to:

- Create your own document templates and use them.

RELEVANT KNOWLEDGE

Though you can download templates, sometimes you need to create a document (which you intend to use numerous times), with some specific personalized details, such as your company/school logo etc. Word processing software helps you to create custom templates to suit your needs.

Create a template

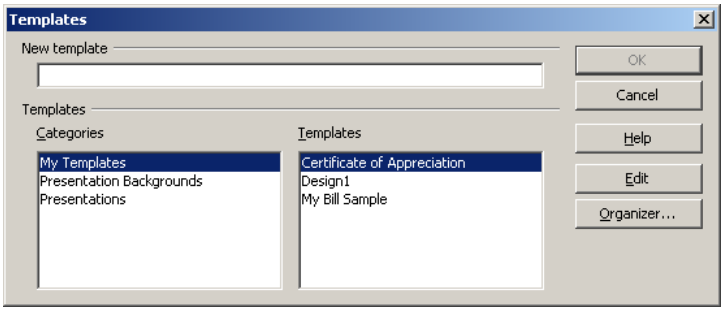
To create a template, the first step is to create a document that will be used as the template. For example to create a template with customized font for different headings and body text, do the following:

1. Go to **File > New > Text Document.**
2. Select **Format > Styles and Formatting F11**. The **Styles and Formatting** dialog box appears as shown adjacent.
3. Create the following styles:
    a. **Heading 1**
        i. Font: Century Gothic
        ii. Size: 18pt
        iii. Color: Green
    b. **Heading 2**
        i. Font: Century Gothic
        ii. Size: 14pt
        iii. Color: Grey 60%
    c. **Text Body**
        i. Font: Arial
        ii. Size: 12pt
4. Select **Insert > Page…**. Select **Page** tab and set the following layout:
    a. Top: 1.5”



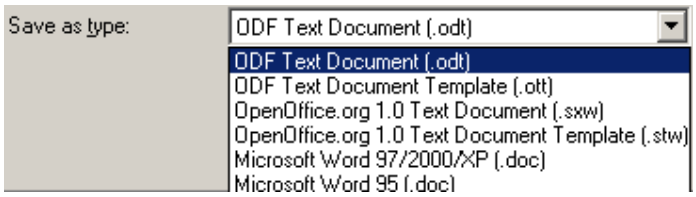
b. Bottom: .5”
c. Left: .75”
d. Right: .75”

5. To save this document as a template, select ***File*** > ***Templates*** > ***Save***. A **Templates** dialog box appears as shown adjacent.
6. Type a name in **New template** text box, for example **MyTemplate01**.
7. Click **OK**.



Alternate method to save templates

1. Select **File > Save As….** A **Save As** dialog box appears.
2. Select **ODF Text Document Template (.ott)** from the **Save as type:** dropdown menu and type a filename, for example **MyTemplate**. Select **Save**.
3. Close the document.



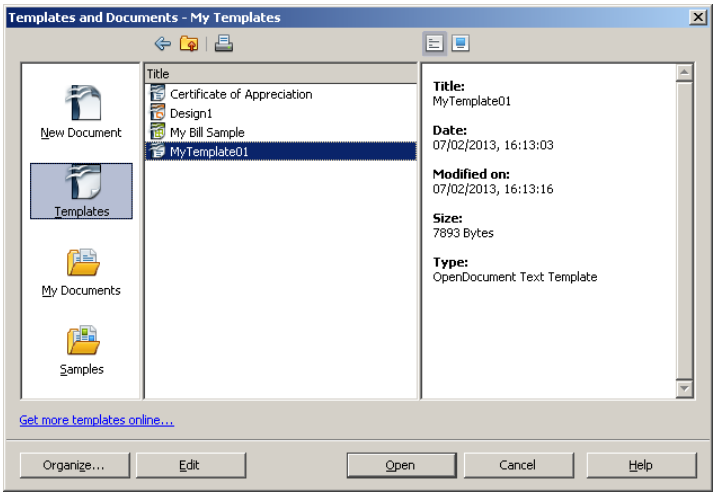
Note:

a. Templates have the file extension ***.ott***.
b. Templates are stored in the folders C:\Documents and Settings\USERNAME\Application Data\OpenOffice.org\3\user\template.

Using a template

To use this template, do the following:

1. Select **File > New > Templates and Documents**. A **Templates and Documents** dialog box appears.
2. Notice the template listed. Select the template and click **Open**.
3. A document based on this template will be



created. Type some content, set headings and observe the results.

Alternatively, to create a document based on the template, do the following:

1. Go to the location where the template is saved. Notice the icon representing a template (figure adjacent).



2. Double-click on the template to create a document based on it. Insert content and apply heading styles. Notice the displayed results.
3. To save this document, select **File > Save** and give an appropriate file name.

Editing templates

To further modify an existing template, do either of the following:

1. Select **File > New > Templates and Documents**. The **Templates and Documents** dialog box appears.
2. Select the template and click the **Edit** button.

Or

1. Go to the location where the template (for example, **MyTemplate.ott**) is located.
2. Right-click the template, select **Open**.



Then,

3. Customize the template by:
    a. Including **page number** in the footer area.
    b. Including your **school name** in the header area.
4. Save the template (**CTRL+S**).
5. Create a document based on this template and observe the changes.

Creating templates from other templates or documents

The need to create a template from other templates or documents arises when you already have a document structure ready for use or you want to customize a downloaded template and use it as a base for other documents you create. To create a template from another template, do the following:

1. Go to templates.openoffice.org.
2. Download a template for example, Service Invoice.
3. Open the template with word processing software. A document based on the template will be created.

4. Modify the document to include Company Name, Address, Contact number, logo, etc.
5. Select **File > Templates > Save…**. Give a file name to this template. The template is ready for use whenever required.

Tip: You may also download and use templates created using Microsoft Word, since OpenOffice.org Writer supports the .DOC format. If you use templates created using for a recent version of Microsoft Word 2007/10/13 (.DOCX), you can download and open them using Microsoft Word 2007/10/13, save them in a .DOC format and then use with OpenOffice.org Writer.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a template for the following: a. Computer repair invoice. b. House sale flyer. c. Service apartment marketing flyer. d. Birthday party invitation. e. Daily and weekly plan. f. Receipt template. Use the following resources to download templates: a. http://templates.openoffice.org b. http://sourceforge.net/projects/aoo-templates/

ASSESSMENT

Answer the following

1. Explain the procedure to create a template.
2. Explain the procedure to edit a template.

Fill in the blanks

1. File extension for word processing templates _____ .

SESSION 2: CREATING ENVELOPES

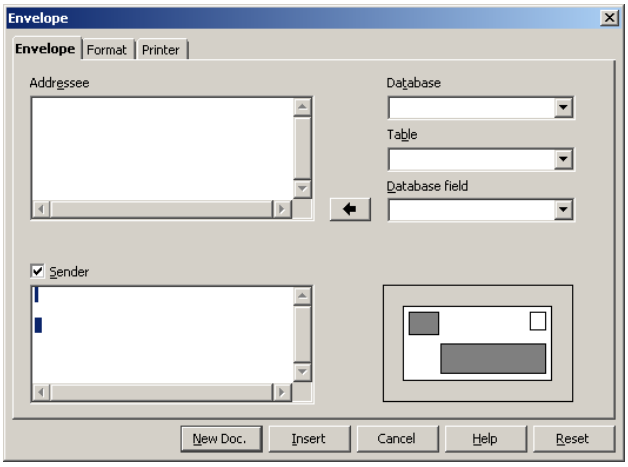
Learning Objectives:
At the end of this session, you will be able to:

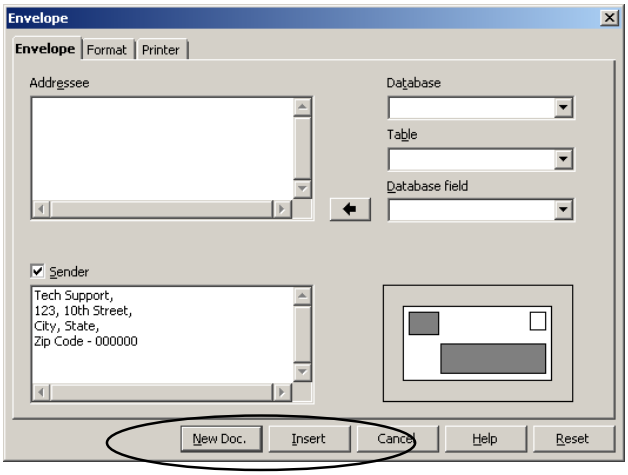
- Create and print envelopes.

RELEVANT KNOWLEDGE

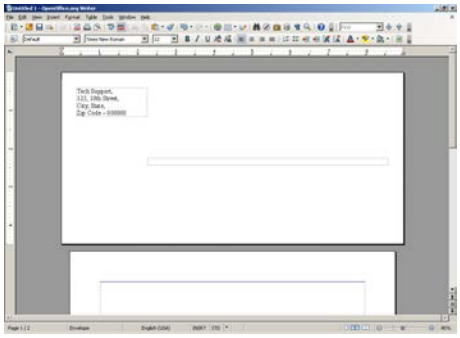
You can create customized envelopes and print them along with the letters that you send to customers or friends. Word processing software has a feature of creating Envelopes that helps when you want to include a standard text on the envelope for example, a return address.

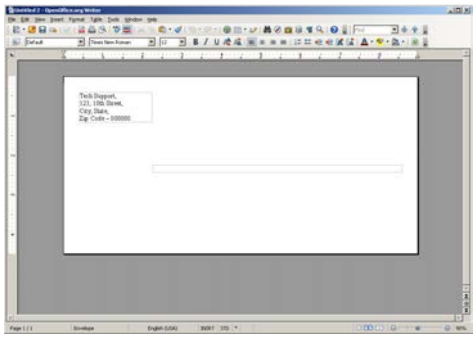
To include a return address to be printed on an envelope, do the following:





1. Open a new document and select **Insert > Envelope…**. An **Envelope** dialog box appears (figure adjacent).
2. Type the return address in the **Sender:** text box (sample below).
    a. If you want the word processing software to print the envelope when you print the document, click the **Insert** button. The software automatically includes an additional page for the envelope (figure below left). This is suitable when you print a single address along with the document. However, remember first to insert an envelope in the printer (prior to printing the document).
    b. If you want to insert the return address and print later, click **New Doc.** Selecting this option creates a new document along with the address that should be printed only on an envelope (figure below right).



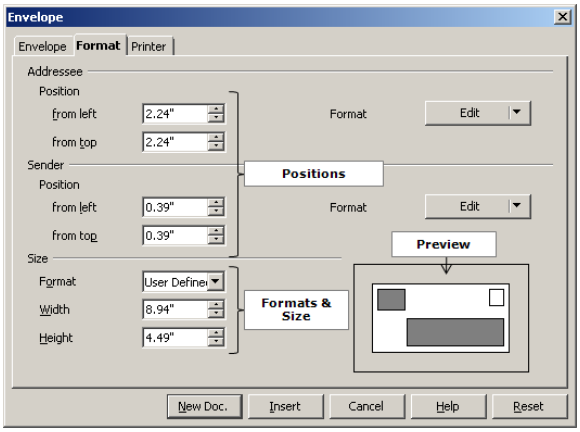


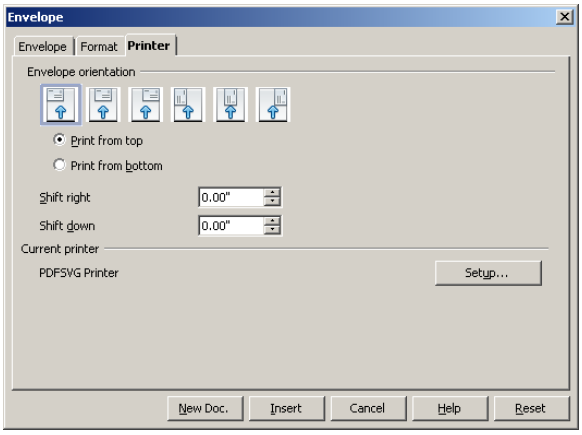
3. Save the documents.
4. Complete the letter and use the **Print** option to print both envelope and letter content separately.

Modifying Envelope Size

Word processing software uses a pre-defined envelope size which you can customize. You may use this feature if the envelope you have has a different size from the one that is pre-defined. To modify the envelope size, do the following:

1. Select **Insert > Envelope…**. The **Envelope** dialog box appears.
2. Select the **Format** tab. Notice the size of the envelope and position of the sender's address (figure adjacent).
    a. Adjust the position of sender and recipient address by changing the values under **Position** in the **Addressee** and **Sender** sections.
    b. Select either a pre-defined size from the **Format** dropdown or use a custom size by specifying values in **Width** and **Height** numeric value boxes.
    c. Select the **Edit** dropdown in Envelope dialog box to modify the format.
3. Depending on your requirement, select either **Insert** or **New Doc.**





Printing on Envelopes

You need to set up the printer in order to print envelopes. You can specify envelope orientation (physical placement of envelopes in the printer) by, doing the following:

1. Select **Insert > Envelope…**. The **Envelope** dialog box appears.
2. Select the **Printer** tab. Notice the settings specified here.
3. Select the orientation from options under **Envelope Orientation** as required.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create an envelope template for greeting cards using the following guidelines: a. Insert pictures and make it colorful. b. Use different font, font size and colors. c. Use your home address as the return address.
2.	Create envelope templates for the following: a. Birthday invitation. b. Paycheck envelope. c. Receipts envelope. Use the following resources to download samples: a. http://templates.openoffice.org b. http://sourceforge.net/projects/aoo-templates/ c. http://designerstoolbox.com/designresources/envelopes d. http://www.zazzle.com/envelopes

ASSESSMENT

Answer the following

1. Explain the procedure to include a return address to be used on an envelope.

Fill in the blanks

1. Envelopes option is available in _____ dropdown menu.
2. Envelope size can be modified using _____ tab of Envelope dialog box.

SESSION 3: CREATING LABELS

Learning Objectives:
At the end of this session, you will be able to

- Create and print labels.

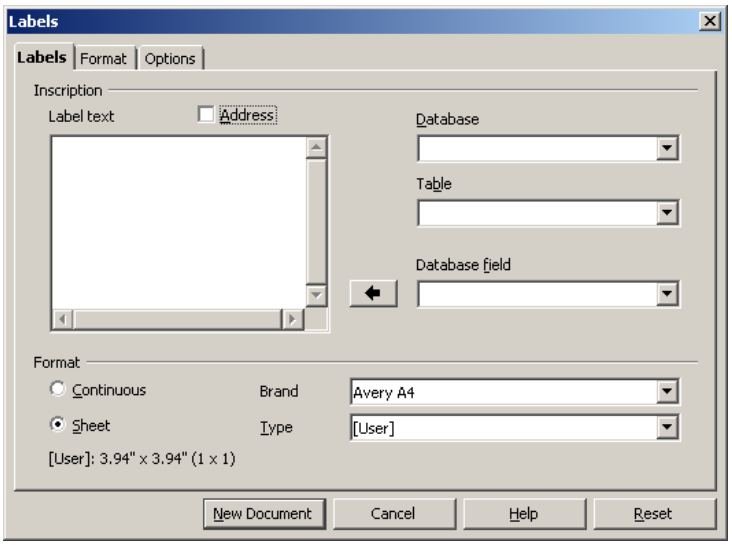
RELEVANT KNOWLEDGE

You can print labels using the word processing software. You use labels to create Identification Cards (I Cards), business (visiting) cards, shopping tags, etc. Usually, labels are printed in identical sets. For example, there may be 10 or 20 identical labels printed on an A4 sheet.

You can either print a single label or a page full of labels. The latter is more commonly used, for example, when you want to print labels with repetitive information such as a store's address (to be pasted on all products sold from a store).

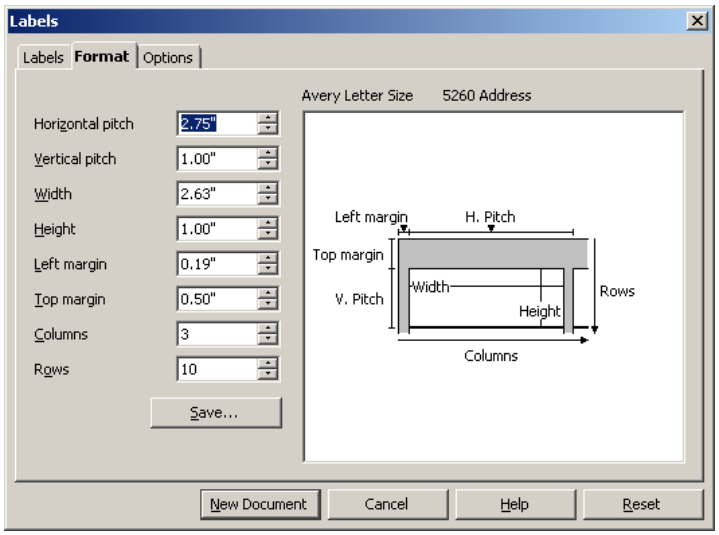
If you want to print 30 labels in a single sheet containing a store's address, you will do the following:

1. Select **File > New > Labels**. A Labels dialog box appears (figure adjacent).
   a. Type the store address in **Label Text** textbox, for example **Star Office Supplies**.
   b. Select the option **Sheet** in the **Format** section.

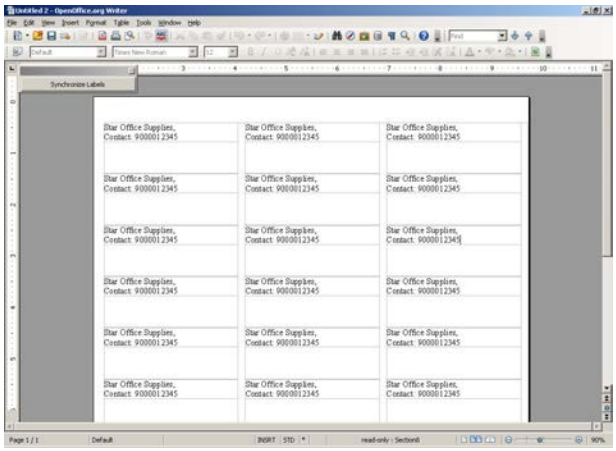


   c. Labels are of varying sizes usually identified by specific Brand and a particular type. So, select **Avery Letter Size** from **Brand** and **5260 Address** from **Type** dropdown lists.
   d. Select the **Options** tab. Check **Synchronize contents** option. Doing so ensures that when you format a single label, it is automatically synchronized with rest of the labels within the sheet.

2. Select **Format** tab. Enter the number of labels to be printed by specifying values in **Columns** and **Rows** numeric text boxes. For example to print 30 labels, enter **3** in **Columns** and **10** in **Rows** (figure adjacent).



3. Click **New Document**. Notice a sheet full of labels is created (figure adjacent).
4. You may now save this document and print on label sheets as required.



If you want to modify the font or content, do the following:

1. Place the cursor on the first label (**Note:** You can edit only the label in first row and first column).
2. Select the text you wish to modify. For example select **Star Office Supplies**, change the font to **Trebuchet MS, size 10** and align it to the **center** of this label.
3. Click **Synchronize Labels**. Notice the formatting replicated to all the other labels. You can modify the content in the first label and replicate to all other labels.

If you want to modify the size of labels, select the Format tab and specify the size as required. This may be helpful in situations when you want to print on labels that do not have standard sizes.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a label template to print 40 labels in a single A4 sheet based on the following guidelines: a. Include school's address with contact number.

	b. Use Verdana, size 10. c. Include school logo (Insert > Picture and resize). d. Include school's email address.
2.	Create label templates for the following: a. CD / DVD jewel case labels. b. File / folder labels. c. Labels for items sold in a supermarket. Use the following resources to download samples: a. http://templates.openoffice.org b. http://sourceforge.net/projects/aoo-templates/

ASSESSMENT

Answer the following

1. Explain the procedure to print 30 labels in a single sheet.
2. Explain the procedure to create a label with custom size.

Fill in the blanks

1. To create Labels, you should select File > New > _____ option.

SESSION 4: USING MAIL MERGE

Learning Objectives:
At the end of this session, you will be able to:

- Understand the purpose of mail merge feature.
- Use mail merge feature.

RELEVANT KNOWLEDGE

Mail merge is a software feature used widely to create personalized cover letters or emails. This feature is very useful when you want to send a letter to multiple recipients and at the same time want to give each letter a personalized touch (i.e. making it appear as if the letter was specifically addressed to them). For example, if you want to send an Annual day celebration invitation to several people, you can use the mail merge feature.

Mail merge is a widely used for a variety of purposes like:

- Communicating promotional offers or clearance sales to customers.
- Inviting a large group for a public presentation or awareness campaign.
- Sending invitations to a selective group for a contest.

Mail merge has two components:

a. **A contact list** from which the contact name, address, etc. is derived.
b. **A letter or email** to which the contact name, address, etc. is attached.

Note: Mail merge supports several data sources such as a SQL database, spreadsheets, text files, web pages, etc. We will use a simple spreadsheet for our example.

Before you work with mail merge, you should have a list of contacts with postal or email addresses ready. If you already have the list ready in a source such as a spreadsheet, you can use that as the source of data. For example, create the following list in a spreadsheet:

	A	B	C	D	E	F
1	Title	Name	Email	Address	City	Postal Code
2	Mr.	Ram	ram@example.org	#3, 10th Street	New Delhi	110005
3	Mr.	Rohan	rohan@example.org	#12-A, 15th Street	Mumbai	400036
4	Ms.	Swetha	swetha@example.org	#3/F, 60th Street	Bangalore	560041

Important: Fields in a database should have appropriate headers such as Title, Name, Email, etc. If you use a spreadsheet or a database without proper header names, mail merge will result in errors, missing data or will not work at all.

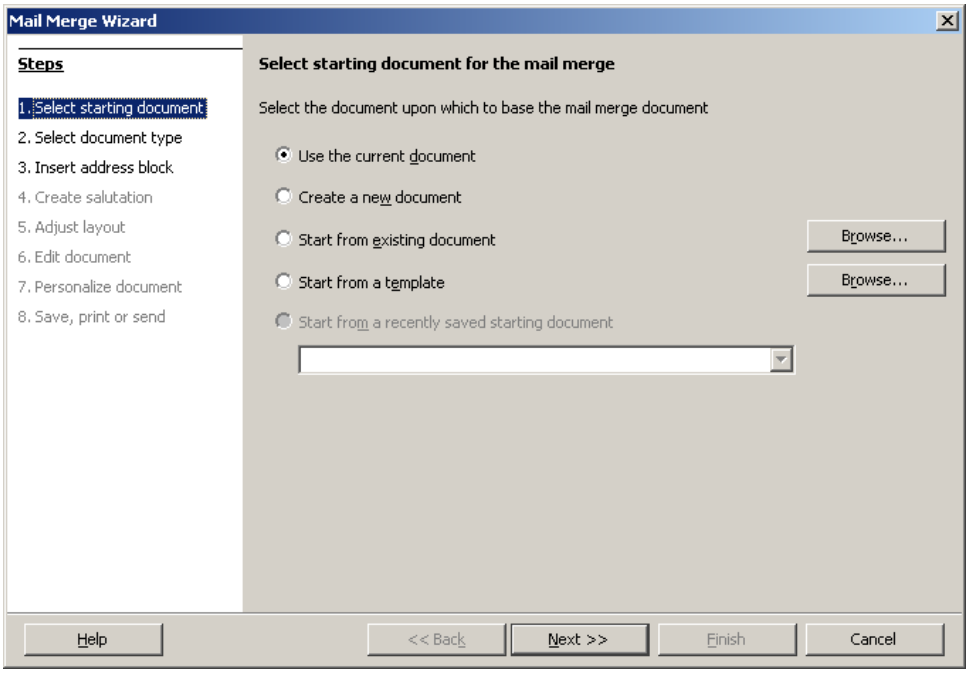
Save this spreadsheet, for example **Address.ods**. This will be used as our data source.

Using Mail merge

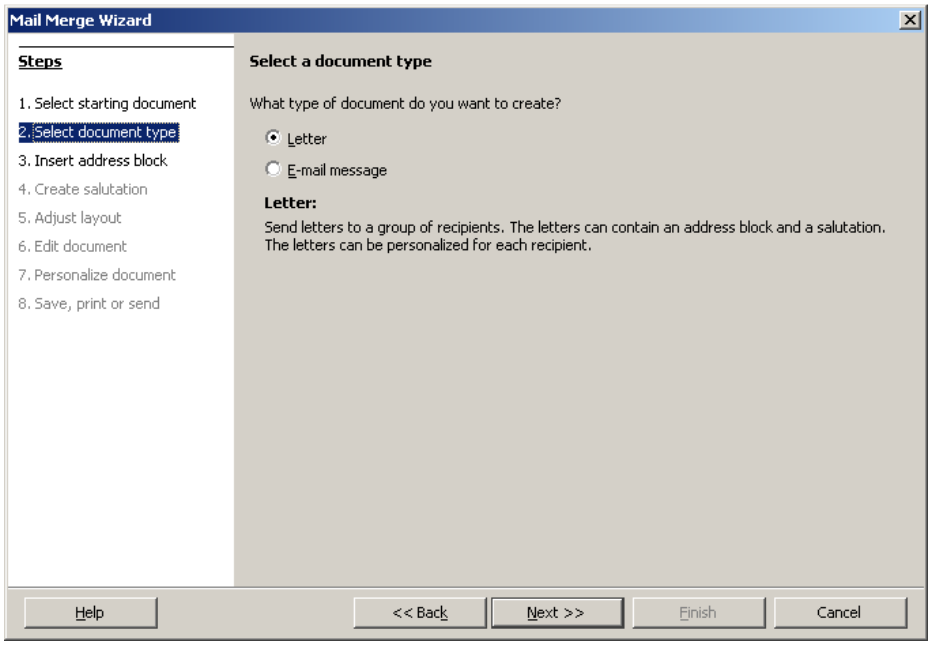
1. Select **File > New Text Document**.
2. This is the second step where you create the letter or mail that will contain the content to be distributed. Create a document with the following content:

To, We are glad to announce our 10th Annual Day Celebration and we cordially invite you to be a part of it. Warm regards, School Leader.

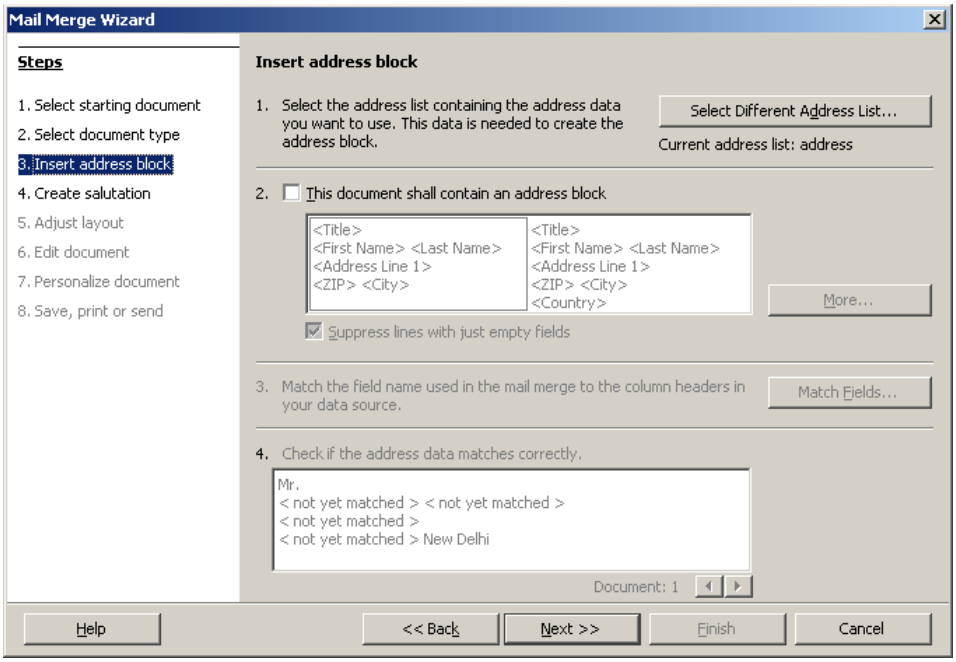
3. Save this document. Select **Tools > Mail Merge Wizard**….A **Mail Merge Wizard** dialog box (Step 1) appears.



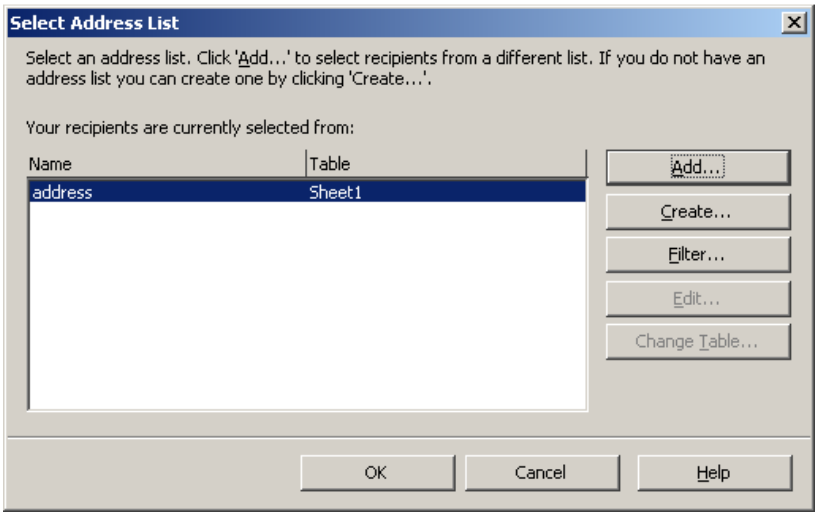
4. Select **Use the current document**, click **Next**. **Select a document type** (Step 2) appears.



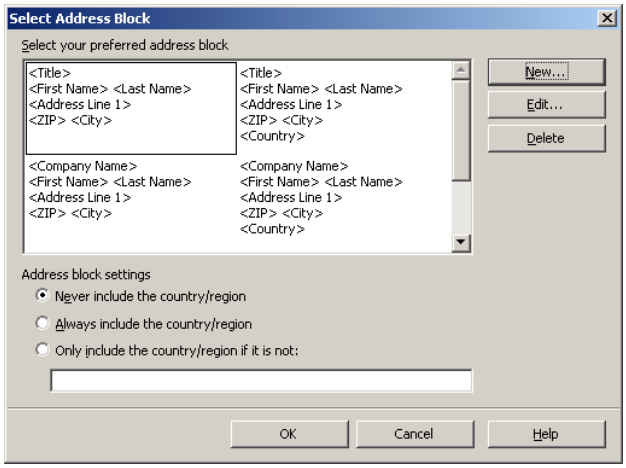
5. Select **Letter** and click **Next. Insert address block** (Step 3) appears.



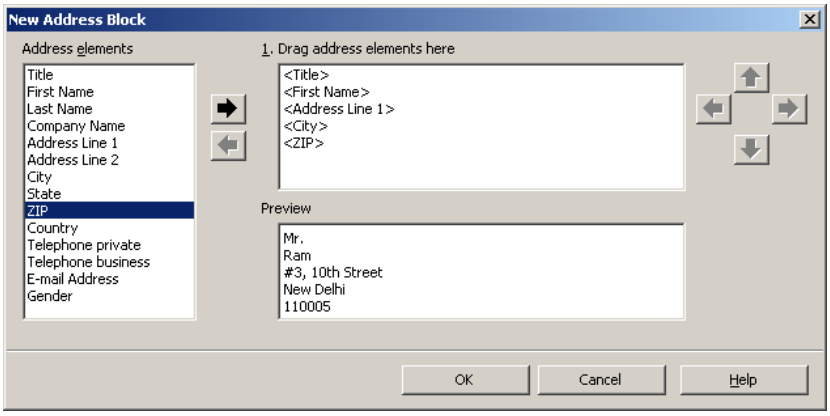
6. Click **Select Different Address list…. A Select Address List** dialog box appears (shown below).
7. Click **Add….** Browse and select the spreadsheet created earlier (**Address.ods**) and click **Open**. Click **OK**.
8. Since we need to add address to this letter, check **This document shall contain an address block**.



Mail merge uses a default address block that requires certain fields such as Title, First name, Last name, etc. To create your own address block, do the following:

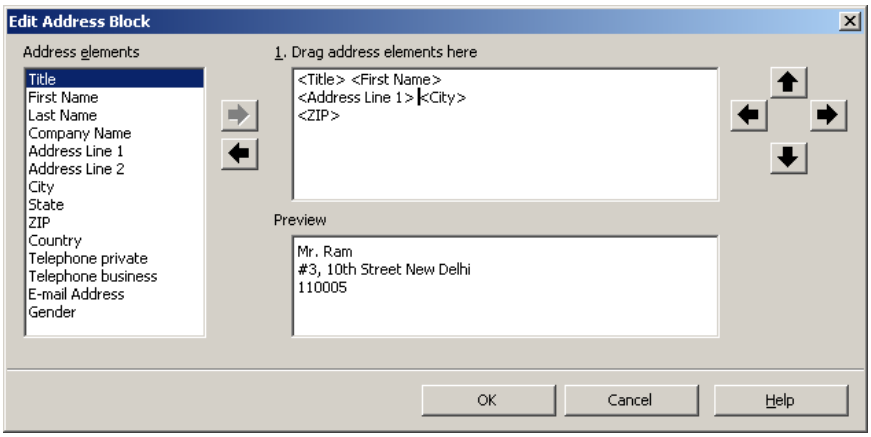


a. Click **More…** button. **Select Address Block** dialog box appears as shown adjacent.
b. Notice different styles of address block here. Click **New…** to add your own address block. **New Address Block** dialog box appears.
c. Select **Title** from **Address elements** list and click ➡. **Repeat** the procedure to add **First Name, Address Line 1, City and Zip** from **Address elements** list.



d. Notice the fields address under **Drag address elements here section** (figure above).

Fields added here may not be properly aligned to your requirements. Use spacebar, delete and enter keys on your keyboard to align field here (Sample below).

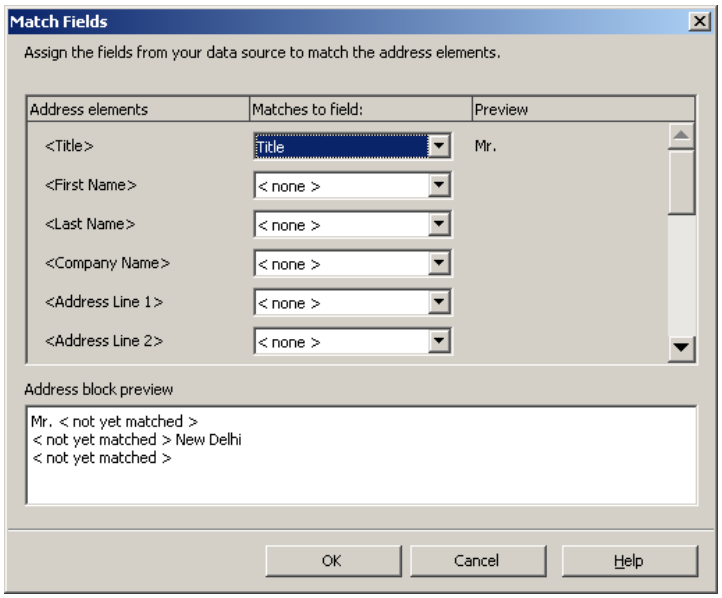


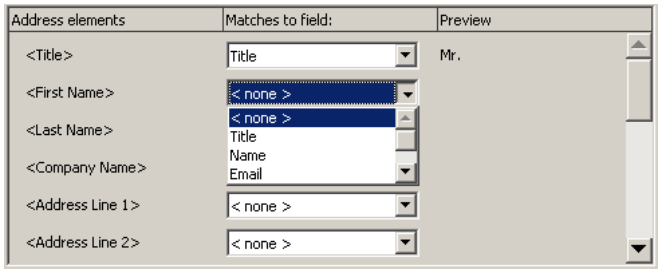
e. Click **OK** twice. You return to Step 3 of the wizard.

Mail merge feature attempts to scan the data source for matching field names and use them automatically. If it is unable to match, you will notice a message in the **Check if the address data matches correctly** textbox. (Notice the message <not yet matched>).

In such cases you need to either rename the fields in the source (spreadsheet in this case) or you can manually map them now.

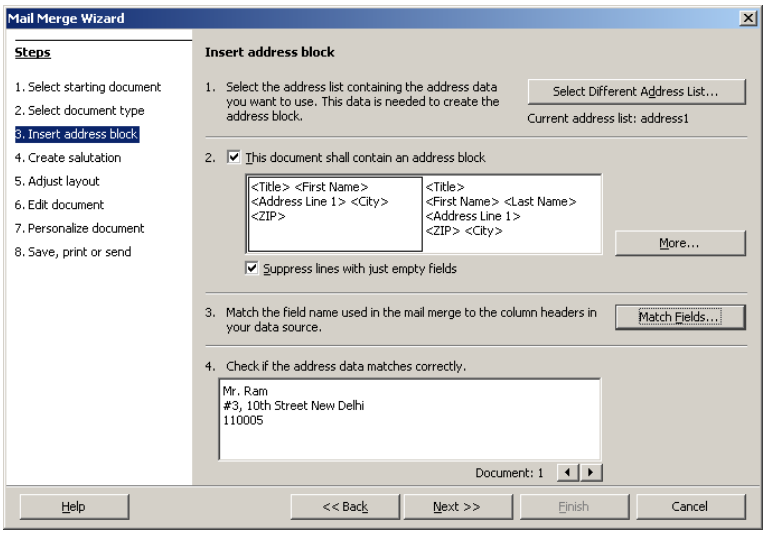
9. To map manually, click **Match Fields….** **Match Fields** dialog box appears as shown adjacent.
    a. Notice the field **Title** and **City** are automatically mapped as the spreadsheet had matching titles. You need to match rest of the fields. Now select the dropdown list next to **<First Name>**, select **Name** from this list.



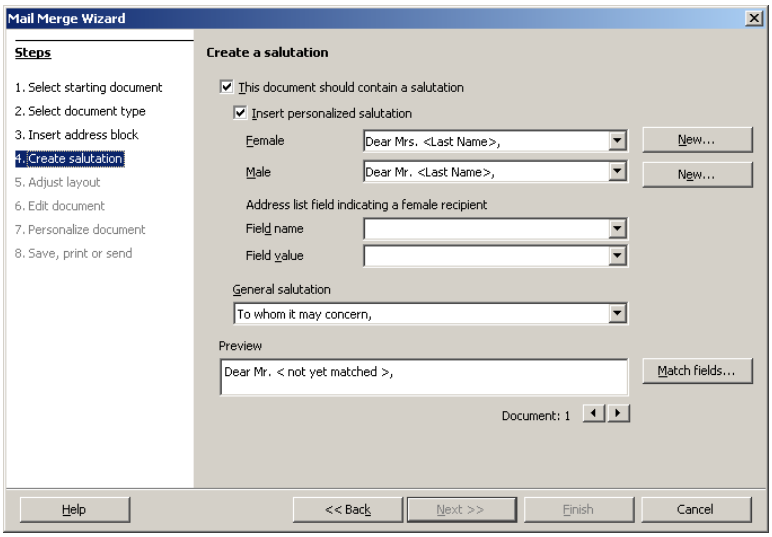


b. Select the dropdown list next to **<Address Line 1>**, select **Address** from this list.

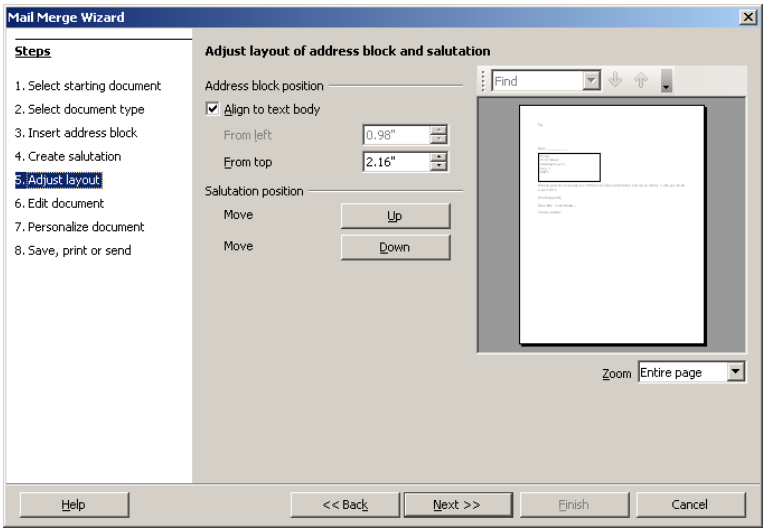
c. Select the dropdown list next to **<Zip>, select Postal Code from** this list.



10. Click **OK**. You should see a window similar to the one below mapped properly.

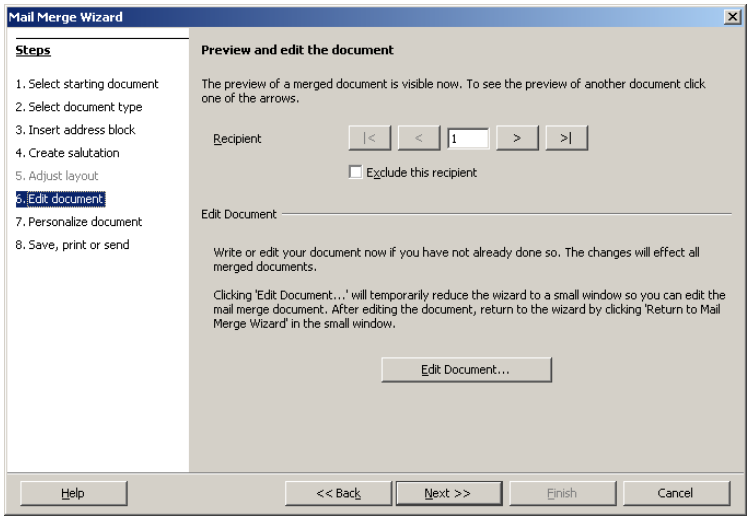


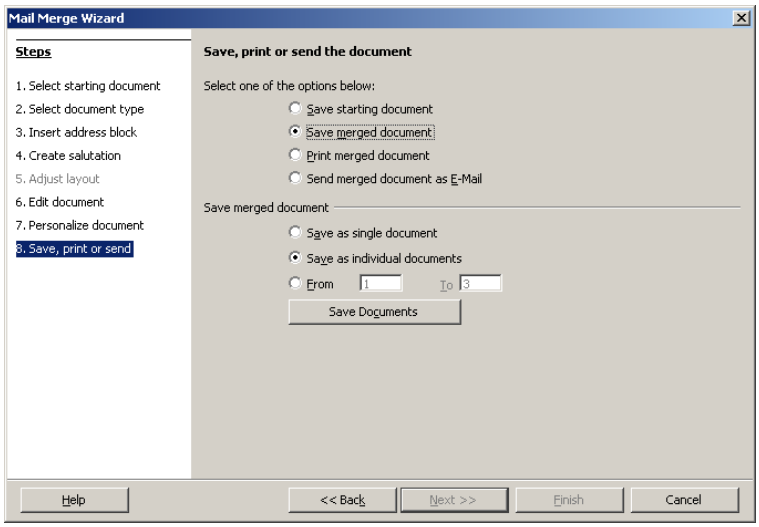
11. Notice the results under **Check if the address data matches correctly** section. Click **Next. Create a salutation** (Step 4) appears.
12. Uncheck **This document should contain a salutation** and click **Next. Adjust layout of address block and salutation** (Step 5) appears.



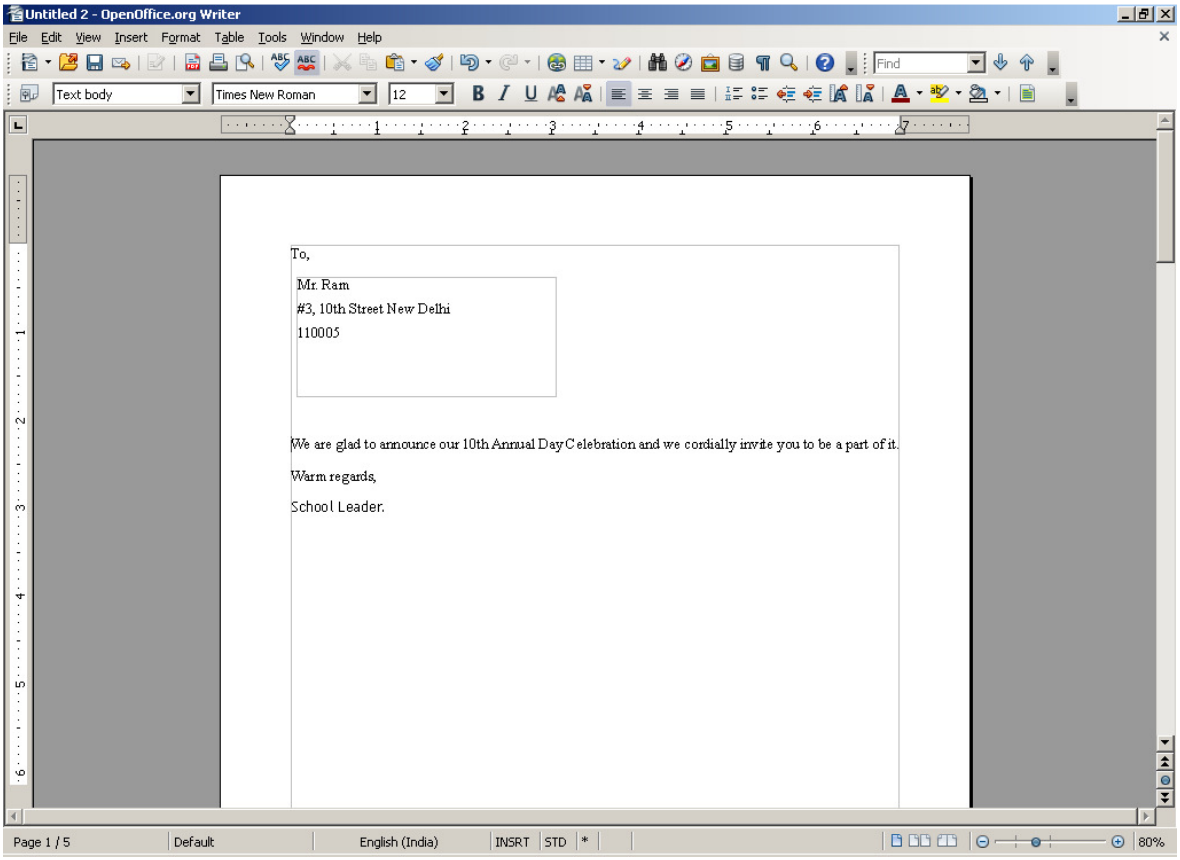
13. Adjust the position where you need the address block to appear in the document and click **Next. Preview and edit the document** (Step 6) appears.

14. Click **Next** twice. **Save, print or send the document** (Step 8).
15. Select **Save merged document. Notice the options** (figure below).
    a. To save individual records as separate documents, select **Save as individual documents.**
    b. To save all the records in a single document, select **Save as single document.** For example, select **Save as single document** and click **Save Documents** button. Type a filename for example, **Mail_merge_output.odt**.





16. Click **Finish**. Open the document created in the previous step. Notice the address blocks displayed in each page of the document (figure below).
17. You may now move the address block, format & align text and print as required.

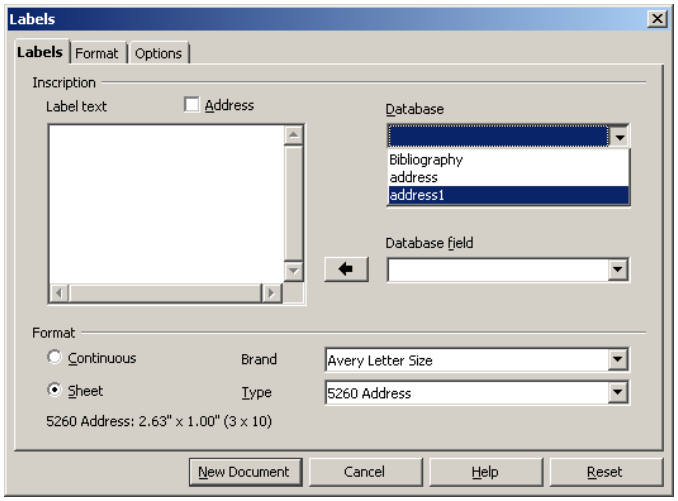


Mail Merge, Envelopes & Labels

Imagine a situation where you need to print hundreds of letters and manually write the addresses of each contact on envelopes. Also it is possible that you may forget to include some contacts. To help avoid such a situation, you can use the envelope printing facility in word processing software and print envelopes along with letters. You can use *mail merge* feature to print personalized envelopes or labels.

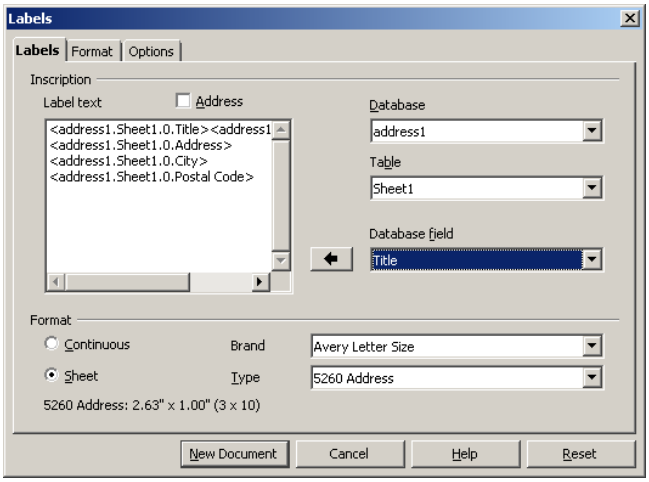
Creating labels from a database

To create labels using the previously created spreadsheet, do the following:

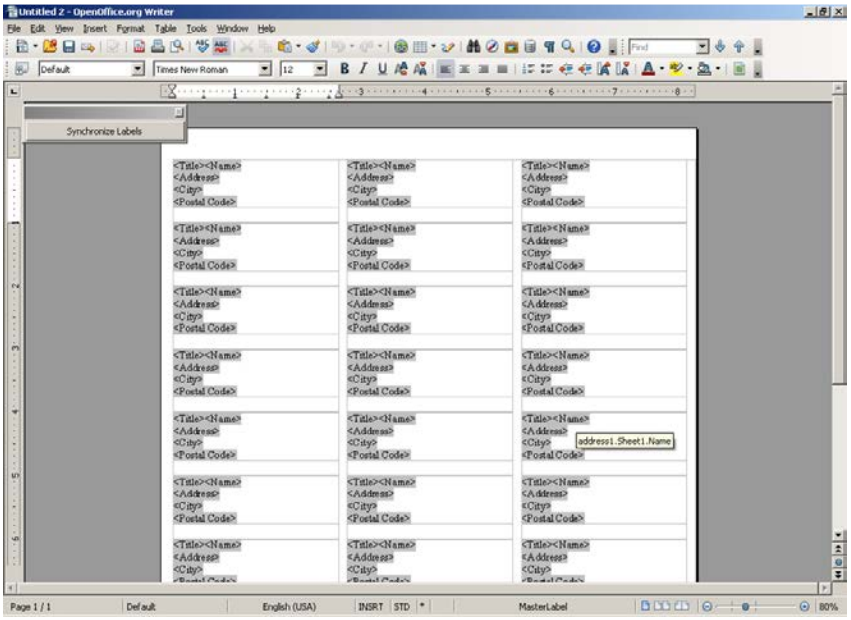


1. Select **File > New > Labels**. A **Labels** dialog box appears.
2. Notice the list of data sources listed under **Database** dropdown list.
    a. Select the address source from **Database** dropdown list.

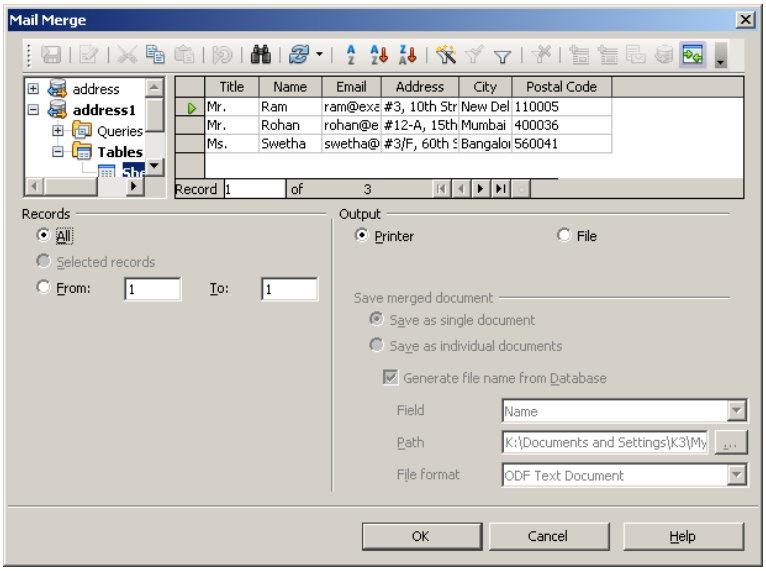
b. Select **Sheet1** from **Table** dropdown list.
c. Select **Title** from **Database** field dropdown and click ⬅ button. Repeat to add **Name, Address, City** and **Postal Code** (figure adjacent).



3. Click **New Document.** Notice the label list created in a new document (figure below).



4. **Select File > Print….** A confirmation popup appears to confirm if you want to print a form letter.
5. Click **Yes**. A **Mail merge** dialog box appears as shown adjacent.



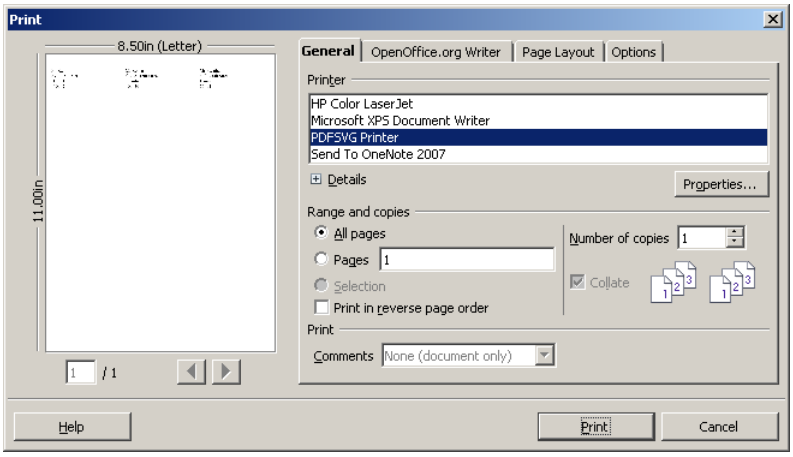
You may create labels for all or selective records from a database;

a. To create labels for selective records, select the records one by one from the record list (use

CTRL + Click to select more than one record).

b. To create labels for all the records, select **All** (default option).

c. To create labels for a specific range, type the range in **From:** and **To:** numeric text box (for example to print first ten records, type 1 to 10).

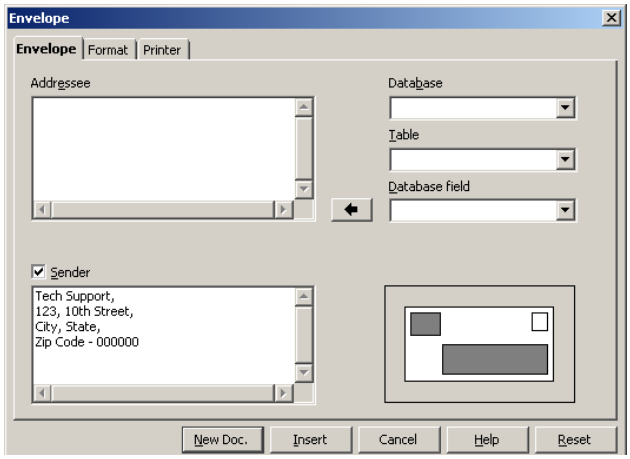


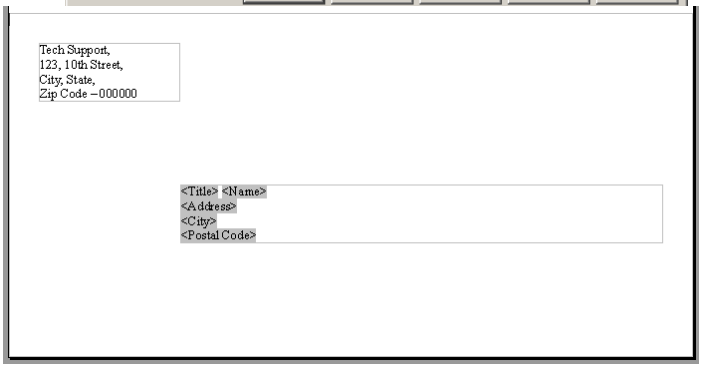
6. Click **OK**. **Print** dialog box appears as shown adjacent.
7. Place the label sheets in the printer and click **Print**. Notice the records printed as individual labels in the sheet.

Create envelopes from a database

To create envelopes, do the following:

1. Select **File > New > Text Document.**
2. **Select Insert > Envelope….** An **Envelope** dialog box appears (figure below).
   a. Select the data source from **Database** dropdown list (use the list created earlier).
   a. Select **Sheet1** from **Table** dropdown list.
   b. Select **Title** from **Database** field dropdown and click ⬅ button. Repeat to add **Name, Address, City** and **Postal Code**.





Click **New Doc.** button. A new document will be created similar to the one adjacent.

Notice the address in the recipient's text box area; records will be populated when you print.

3. Select **File > Print…**. A confirmation popup appears to confirm if you want to print a form letter.
4. Click **Yes**. The **Print** dialog box appears.
5. Click **Print** and observe the results.

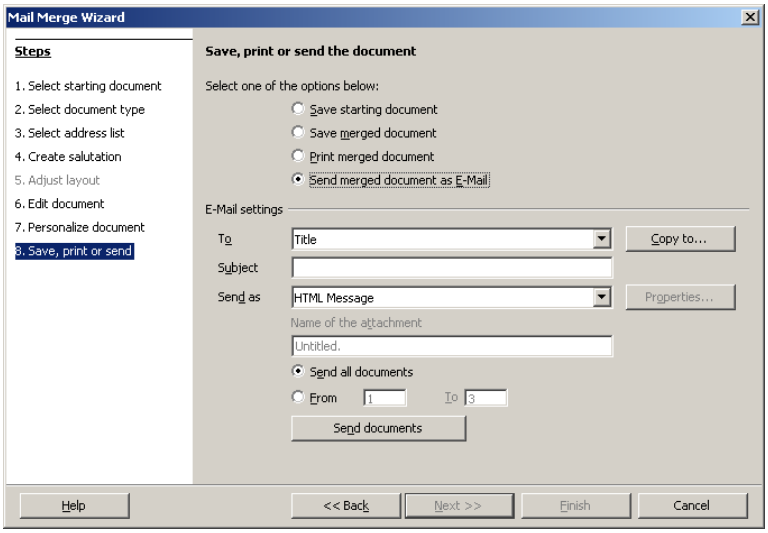
Mail Merge using E-mail

To send bulk emails using mail merge, do the following:

1. Create a new document with the following content.

Dear Customer, We are pleased to announce 50% discount as you are a privileged customer. Please bring a copy of this email or call +91 9999912345 to claim this discount. Regards, John, Manager, Customer Service.

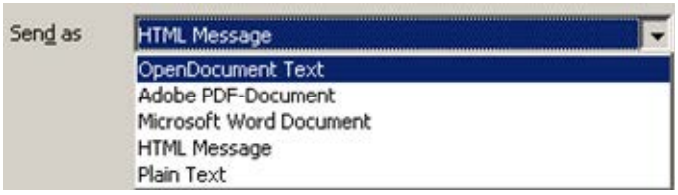
2. Select **Tools > Mail Merge Wizard…. Mail Merge Wizard** dialog box appears, click **Next**.
3. **Select a document type** section appears. Select **E-mail Message** and click **Next**.
4. **Insert Address Block** section appears, click **Select Address List…. Select Address List** dialog box appears, select the data source used earlier. Click **OK** and Click **Next**.



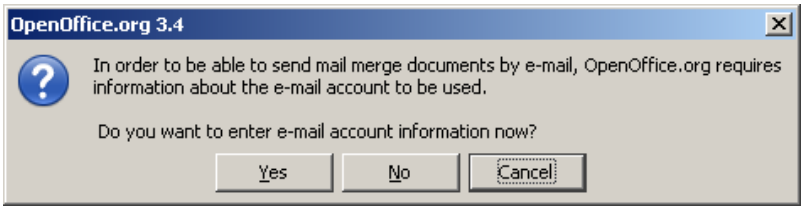
5. **Create a Salutation** section appears; click **Next**.
6. **Preview and edit the document** section appears, click **Next**.
7. **Personalize the mail merge documents** section appears, click **Next**.
8. **Save, print or send the document** section appears. Select **Send merged document as E-mail** (figure above).

9. You now need to map the email address field to enable mail merge send this letter to requisite email addresses.
    a. Select the down arrow next to **To** and select the field **Email** from the list.
    b. Type the subject, for example "**Special Discount**".
    c. You can send this announcement as a HTML message, Adobe Acrobat document (PDF), etc. Select **HTML message** from **Send as** dropdown list.

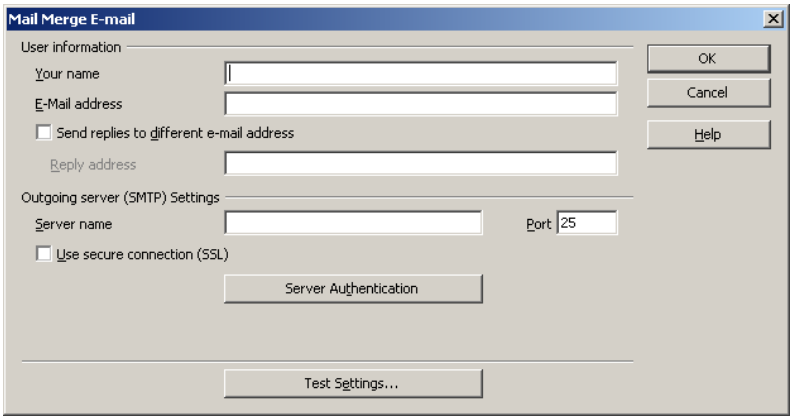
Note: You can send this in a variety of formats such as Adobe Acrobat Document (PDF), Microsoft Word Document, HTML Message or Plain Text. Use the dropdown menu next to Send as option to select the format. Selecting any other format other an HTML Message or Plain Text will result in sending the content as an attachment.



10. Click **Send documents** button. A popup appears similar to the one below.



11. You need to specify the email account details from which these mails are sent. Click **Yes**. A **Mail Merge E-mail** dialog box appears as shown adjacent.



    a. Type your name in the **Your name** text box.
    b. Type your email address in **E-mail Address** text **box**.
    c. Type **the SMTP address** in **Server name** (for example, smtp.gmail.com) and specify the port number in **Port** numeric text box. Refer to ISP's website for exact details.
    d. Click **Test Settings…** button to check if the settings are configured properly.

Note: Since Word processing software attempts to send this email directly (instead of using a email client software), all you need to specify is only the SMTP settings (POP3 settings are not required).

12. Click **OK**. Word processing software will now attempt to send this letter to the emails available in the data source list. Click **Finish**.

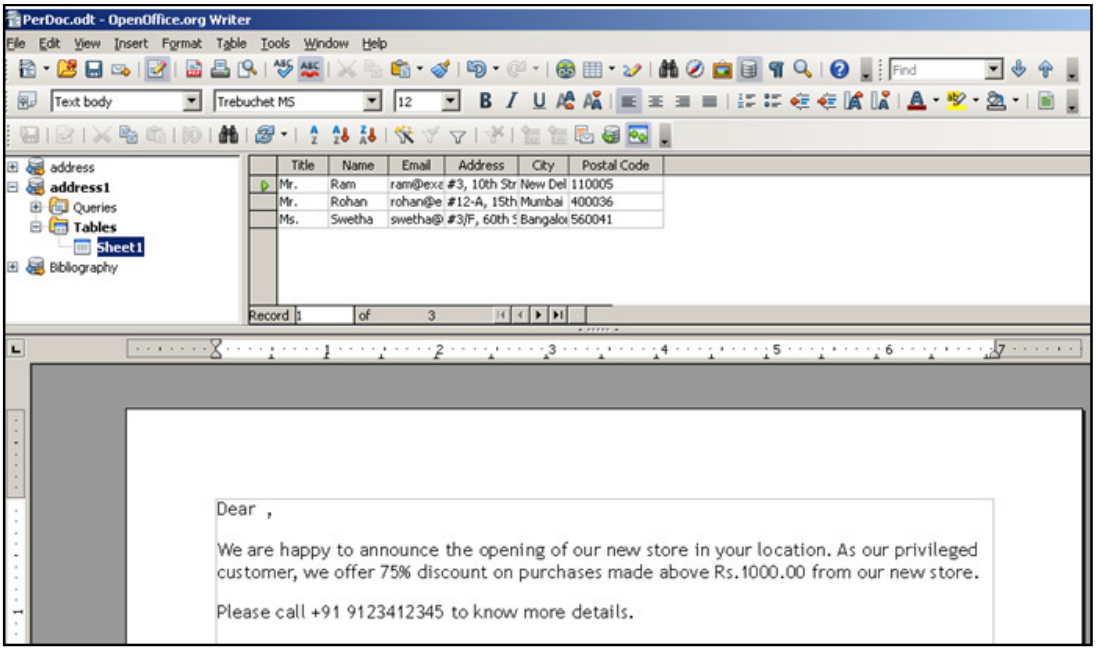
Personalizing Letters

Instead of sending generic emails, you may further customize the letters or emails by including name of the customer. This is possible by including relevant field from the database within the document.

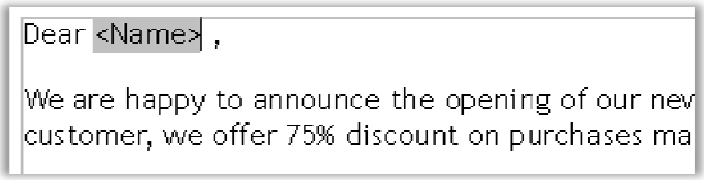
1. Create the following content in a new document.

Dear ,
We are happy to announce the opening of our new store in your location. As our privileged customer, we offer you 75% discount on purchases made above Rs.1000.00 from our new store.
Please call +91 9123412345 to know more details.
Regards,
John,
Manager, Customer Service.

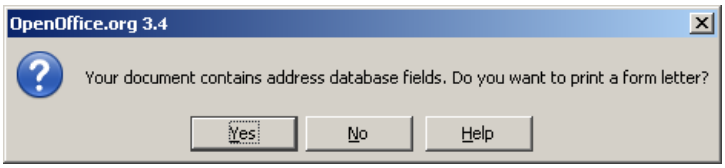
2. Now place the cursor next to **Dear**. Press **F4** on your keyboard. Notice the data source used earlier is displayed (figure below).



3. Click on **Name**, drag and drop it after the text **Dear**. Notice the field **Name** added to this document (figure adjacent).



4. Select **File > Print…**. A popup similar to the one adjacent appears.



5. Click **Yes**. A **Mail Merge** dialog box appears.
6. Click **OK**. The **Print** dialog box appears.

Print this document and observe the field Name replaced with actual names from the data source making it appear personalized.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a document inviting your classmates for: a. Special weekend lab classes for computer networks & web design. b. Weekend classes for engineering entrance exam preparation. Collect email addresses of your classmates and save it in a spreadsheet. Perform a mail merge and send the invitation to all your classmates as: • HTML Message • Microsoft Word Document (Attachment) • Adobe Acrobat Document, PDF (Attachment)
2.	Create newsletters for the following: a. Price list of Tablets & Smart Phones including technical specifications & features. b. Price list for stationary items from at least three different stores. Send this to your friends and classmates as an HTML message. Use the following resources to download samples: a. http://templates.openoffice.org b. http://sourceforge.net/projects/aoo-templates/

ASSESSMENT

Answer the following

1. Explain the purpose of mail merge.
2. Explain the procedure to perform a mail merge for printing letters.
3. Explain the procedure to perform a mail merge for sending an invitation as a PDF attachment.
4. Explain the procedure to create envelopes using Mail merge.
5. Explain the procedure to create labels using Mail merge.

Fill in the blanks

1. Mail merge Wizard option is available in _____ dropdown menu.

SESSION 5: CREATING MACROS AND AUTOMATING TASKS

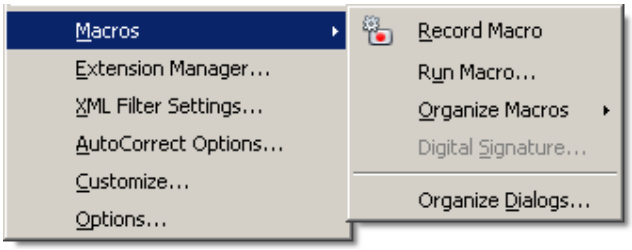
Learning Objectives:
At the end of this session, you will be able to:

- Create and use macros to automate tasks.

RELEVANT KNOWLEDGE

You have learnt to create macros in spreadsheet software. As in a spreadsheet, you can create macros in word processors too. As you know, a macro is created to combine a series of frequently repeated tasks into a single step. Macros help save time, increase efficiency, and improve productivity when a significant amount of work is repeatedly performed. The macro is created by "recording" a series of actions and assigning them to a single keystroke. The term "record" refers to the process of creating the macro and the term "run" refers to a macro execution.

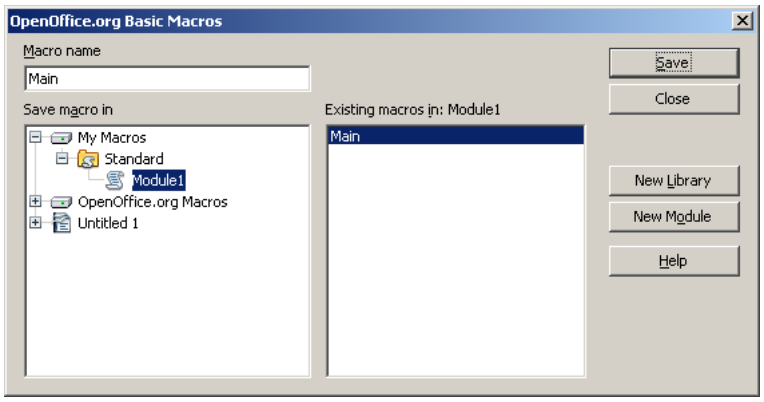
To understand macros, do the following:



1. Open a new blank document. Select **Tools > Macros**.
2. **Click Record Macro**. A **Record Macro** popup appears.
3. Now do the following:
    a. Set the font to Verdana, Size 10.
    b. Insert a 5 x 5 table.



4. Click **Stop Recording**. **OpenOffice.org. Basic Macros** dialog box appears.
5. Type a name for this Macro, for example **MyMacro01**. Click **Save**.

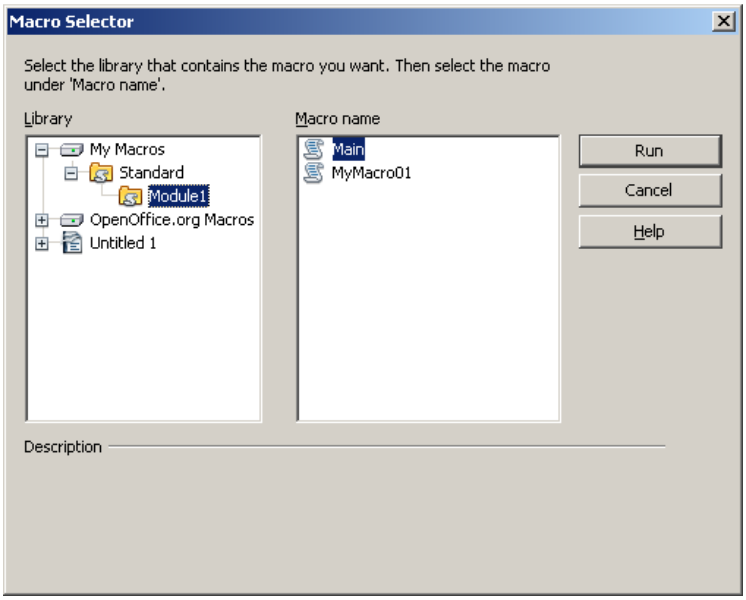


Now the macro is ready for use. Close the document.

To use this Macro, do the following:

1. Select **File > New > Text Document.**
2. Select **Tools > Macros.**
3. Click **Run Macro….** A **Macro Selector** dialog box appears as shown below.

4. Expand **My Macros > Standard > Module1**. Notice the macro under Macro name (figure above, right).
5. Select **MyMacro01**, click **Run**.



EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a macro for including a signature in a document using the following guidelines: 4. Type your name in the first line. 5. Include your contact number and email address in the second line. 6. Format the signature to use verdana font, size 10. Save and apply this macro to a new document.

ASSESSMENT

Answer the following

1. Explain the procedure to create a macro with an example.

Fill in the blanks

1. Macros are available in _____ dropdown menu.
2. You should select _____ option in Macros submenu to record macros.
3. You should select _____ option in Macros submenu to execute a macro.

SESSION 6: LINKING WORD DOCUMENTS TO DATA IN AN WORKSHEET

Learning Objectives:
At the end of this session, you will be able to:

- Link word documents to data stored in spreadsheets.

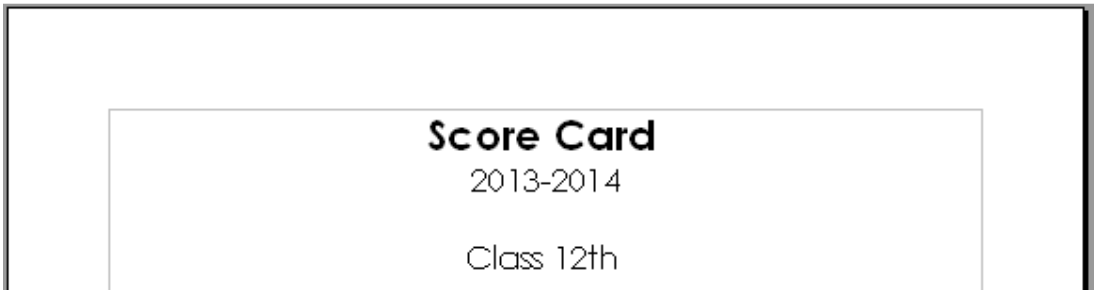
RELEVANT KNOWLEDGE

You can link worksheets from spreadsheet software to documents. You may come across a situation where you want to represent data (already existing) from a spreadsheet in the document you are preparing. You may also want that any change in the spreadsheet, should be reflected on your document too. Word processors have a feature that helps you to link data from external sources such as spreadsheets.

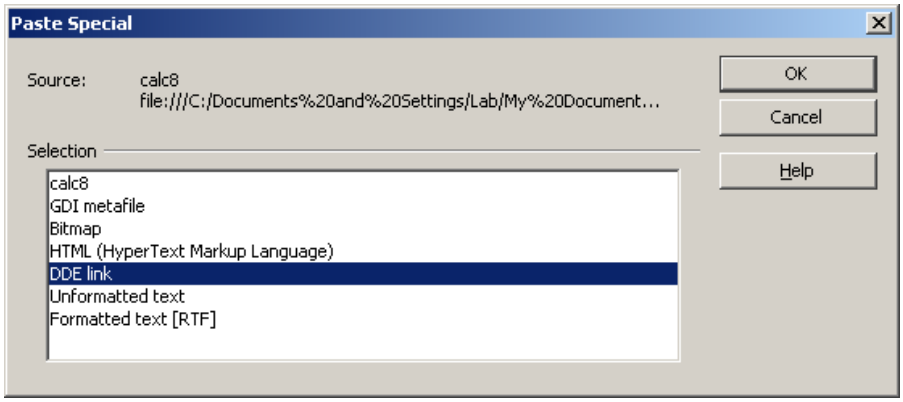
This feature is useful when you want spreadsheet data to be available as a table in text documents and at the same time, you want to maintain a link between the two. To understand this, look at the following example: To learn how to link a spreadsheet to a document, do the following:

	A	B	C	D
1	Name	Term 1	Term 2	Term 3
2	Ram	75	65	
3	Rohan	76	75	
4	Vishal	80	87	

1. Create a spreadsheet with the adjacent details.
2. Save the spreadsheet, as **scorecard.ods**.
3. Now create a new document similar to the one below.

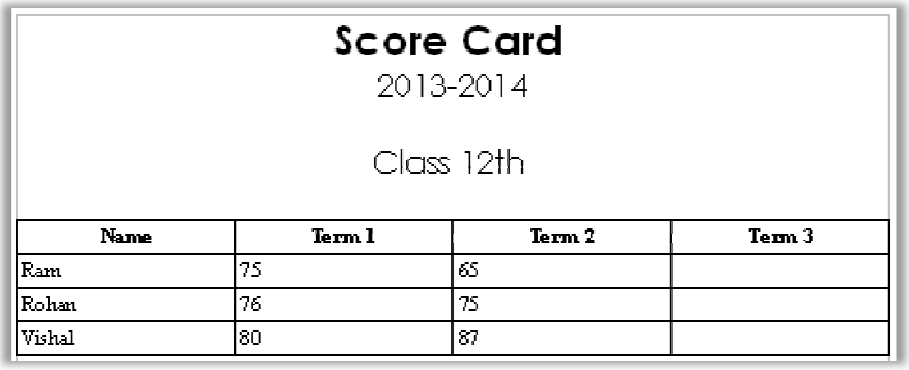


4. Switch to spreadsheet software. Copy the range from **A1:D1 to A4:D4**.
5. Switch to the document and place the cursor where you want to paste this data (below the text Class 12th).
6. Select **Edit > Paste Special…. Paste Special** dialog box appears (figure below).



Note: You can also use the shortcut **CTRL+SHIFT+V** to launch the **Paste Special** dialog box.

7. Select **DDE link** from the **Selection** section and click **OK**. Notice the cells are pasted as a table (figure below).



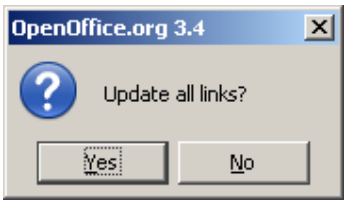
Score Card

2013-2014

Class 12th

Name	Term 1	Term 2	Term 3
Ram	75	65	
Rohan	76	75	
Vishal	80	87	

8. Save this document, for example **Marksheet.odt**. Close the document.
9. Now change the values in the spreadsheet (replace names or marks).
10. Now open the word document; a popup appears similar to the one adjacent.



11. Click **Yes**. Notice the values are automatically updated.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a spreadsheet similar to the one in this session. Replace the names in the spreadsheet with names of your classmates. Populate the table with term 1, 2 & 3 scores for a particular subject. Create a score card in word processing software using the following guidelines:

	Score Card 2013-2014 Subject Name, Class 12th a. Create a structure similar to the one above. b. Include a logo at the right top and school address at the footer area. c. Replace "Subject Name" with a subject of your choice (match it the subject name in the spreadsheet). d. Link the data from spreadsheet to this document.

ASSESSMENT

Answer the following

1. Explain the procedure to link a range of cells from a spreadsheet to a document.

Fill in the blanks

1. Paste Special is available in _____ dropdown menu.
2. Shortcut to launch the Paste Special dialog box _____.

SESSION 7: SAVE A DOCUMENT OUTLINE AS A PRESENTATION

Learning Objectives:
At the end of this session, you will be able to:

- Send a document outline to a presentation.

RELEVANT KNOWLEDGE

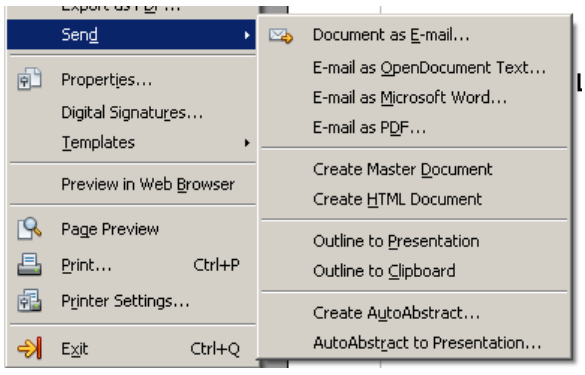
You can create an outline from a document and save it as a presentation. Being able to create outlines away from the presentation tool allows you to focus on content. You can style it up later in the presentation tool. It's also a great help when you are working from someone else's document, because you can markup an existing document and then quickly produce a presentation from it.

An outline is a document that briefly summarizes the information that will be included in a paper, book, speech, or similar document. It shows the order in which the information will be presented and indicates the relationship of the pieces of information to each other.

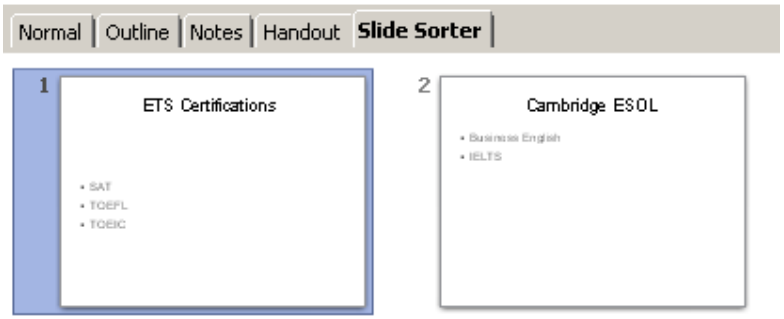
Outlines allow you to map your thoughts in a coherent and logical manner. They also help you identify if you have left out important information or added superfluous/unnecessary ideas. This is very important for creating great presentations too! Using a word processor you can write outlines by adding, deleting, reorganizing, or even completely revamping information as much and as often as needed. When satisfied, you can transfer the created outline to presentation software.

To create an outline, do the following:

1. Open a new blank document in word processing software.
2. Create a document using headings (sample below):
    a. ETS Certifications (Heading 1)
        i. SAT (Heading 2)
        ii. TOEFL (Heading 2)
        iii. TOEIC (Heading 2)
    b. Cambridge ESOL Certifications (Heading 1)
        i. Business English (Heading 2)
        ii. IELTS (Heading 2)
3. To send this document outline to a presentation, **File > Send** (figure adjacent).



4. Click **Outline to Presentation**. Notice a presentation is created based on the document outline (figure below).



Note that only specific styles such as headings are imported to a presentation and normal text content are ignored. Also note pictures, objects, shapes, etc. cannot be sent to presentation software.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a document on the following topics: a. CAT b. GMAT c. TOFEL d. TOEIC Summarize the key points using heading levels 1 – 3; provide detailed information on the above mentioned topics. Create an outline in a presentation using the procedure dealt in this session.

ASSESSMENT

Answer the following

1. Explain the procedure to create a presentation from a document.

Fill in the blanks

1. _____ option from Send submenu should be used to send a document outline to a presentation.

SESSION 8: SAVE AND SHARE A DOCUMENT FOR REVIEW

Learning Objectives:
At the end of this session, you will be able to:

- Prepare a document for review.

RELEVANT KNOWLEDGE

What does reviewing a document mean? A review is the task where a document is strategically analyzed to determine how well it fulfills its stated purpose, how effectively it conveys meaning, and how well it will serve the needs of the target audience. The person who reviews the document is called the *reviewer*. A reviewer indicates what is wrong in a document and points to solutions. The review process establishes a dialog between the reviewer and the author. Reviews occur when a document is under development.

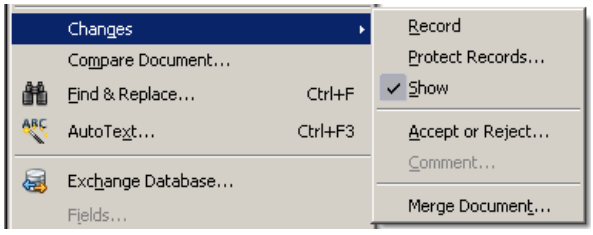
Now imagine if you were asked to review a printed document. You would use highlighters, color markers etc to highlight corrections and changes along with comments. Similarly, you can use the *tracking and reviewing* feature within word processing software to review, change and also track changes in a document. This feature comes in handy when you review /want someone to review a document and correct / point out mistakes before the final print.

Note to Instructor: Combine this session with next session.

For example, create a document with the following content:

You can send a document for review using Windows Live Skydrive, Sharepoint Workspace, Google Docs, as an attachment through email, uploading to an ftp server, etc.

Before sending this document for review, you should indicate that this document is to be tracked for changes. Tracking changes helps you to identify the proposed changes made to a document. To enable tracking, do the following:



1. Select **Edit > Changes**.
2. Click **Record**. Save this document.
3. You can share this document for review through a variety of ways. For example, you can share this document through email to someone in your class.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Send the document to your classmates created in previous session for review. Enable tracking before sending the document.

ASSESSMENT

Answer the following

1. Explain the purpose of tracking and the procedure to track changes in a document.

Fill in the blanks

1. To enable tracking, you should select _____ option from Changes.

SESSION 9: UNDERSTANDING TRACK CHANGES AND COMMENTS

Learning Objectives:
At the end of this session, you will be able to:

- Track changes, review changes and include comments in a document.

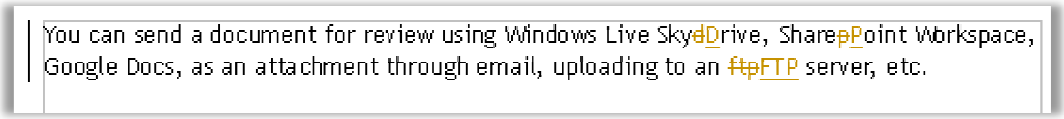
RELEVANT KNOWLEDGE

In the previous session you learnt to enable tracking. To understanding tracking, you need to make changes to the document.

Now as a reviewer, make the following changes to the document:

1. Change “Skydrive” to “SkyDrive”
2. Change “Sharepoint” to “Share Point”
3. Replace “ftp” with “FTP”

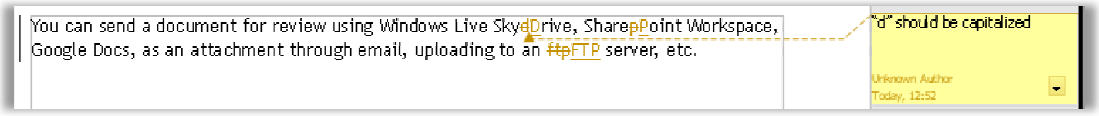
Notice the replaced text displayed with strikeouts (Sample below). Since the tracking is enabled, word processing software automatically adds additional text formatting that is easy to visually track changes in a document.



Inserting Comments

You can also insert comments in a document. This feature helps establish a dialog between the reviewer and the author. Also, this is a means to justify correction or provide additional guidelines. For example to insert a comment, do the following:

1. Place the cursor where you need to insert the comment or select a block of text.
2. Select **Insert > Comment**. Include a comment, for example select the text “SkyDrive” and include the comment *“d” should be capitalized*.

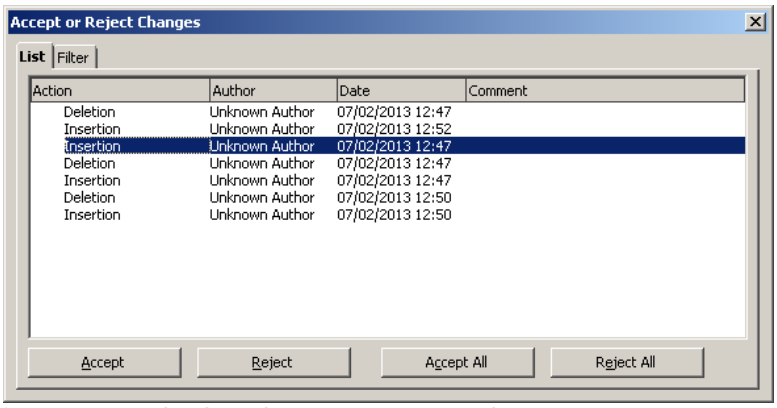


3. Now save this document and send this back to the creator of this document.

Reviewing Changes

Once the author receives the document, he/she can review the changes made to this document and easily identify through the highlighted areas in this document. You can *accept or reject* the changes made by a reviewer. To review each change, do the following:

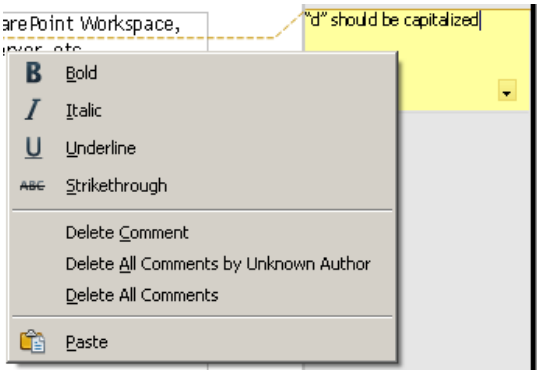
1. Select **Edit > Changes > Accept or Reject….**An **Accept or Reject Changes** dialog box appears as shown adjacent.



2. Notice the list of items tracked; select an item under **Action** to notice the change made to the document.
    a. If you want to reject a change, click **Reject**.
    b. If you want to accept a change, click **Accept**.
    c. Select **Accept All** to accept all the changes in the document.
    d. Select **Reject All** if you don't want to accept all the changes.

Delete a comment

To delete a comment, right-click on the comment. A popup appears similar to the one adjacent.

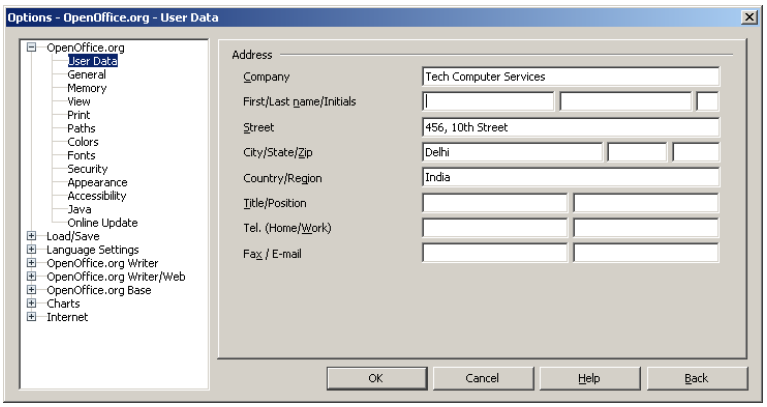


    a. To delete a single comment, click **Delete Comment**.
    b. To delete all the comments in this document, click **Delete All Comments**.

Configuring the author name

If you have noticed, the author name is displayed as "Unknown Author". You need to configure the name of the author for word processing software to record the name along with other changes in the document. To specify an author name, do the following:

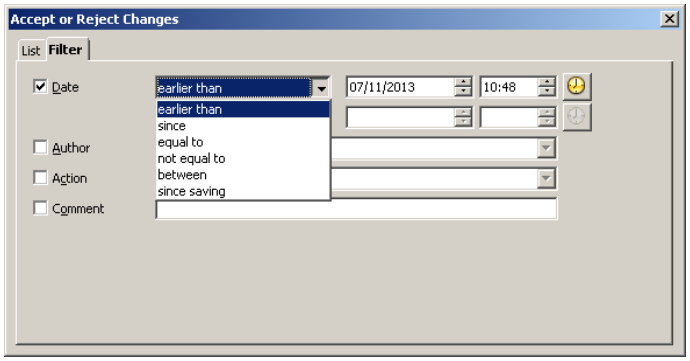
1. Select **Tools > Options**. An **Options - OpenOffice.org - User Data** dialog box appears (figure adjacent).
2. Type the name in **First/Last name/Initials** section (right pane) under **User Data**.
3. Click **OK**. Now word processing software will display the name instead of "Unknown Author".



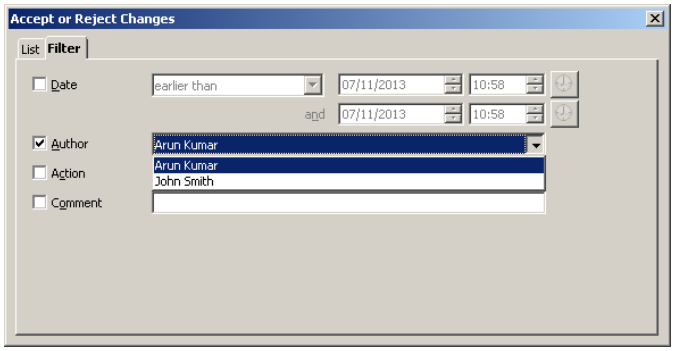
Using Filters

Once you have set names, you can use the filter tab to display changes made a particular person, changes made on a particular date, etc.

2. Select **Edit > Changes > Accept or Reject….**An **Accept or Reject Changes** dialog box appears.
3. Select **Filter** tab.
   a. To filter based on a specific date, check **Date** and dropdown arrow next to **Date** (figure adjacent).



   b. Select appropriate value from this dropdown and select date & time. Observe the results.

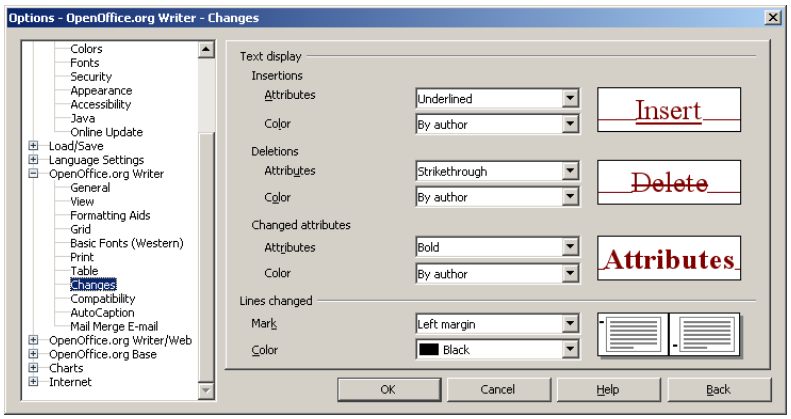


   c. To filter changes made by a particular person, check **Author**.
   d. Select the name of the person from this dropdown list. Observe the results displayed.

Modifying Markup appearance

Markup texts are comments, ink annotations, insertions and deletions, and formatting changes that you make during the review process. You can modify the color or style used to differentiate changes made to a document. To modify, do the following:

1. Select **Tools > Options**. The **Options - OpenOffice.org** dialog box appears.
2. Expand the **OpenOffice.org Writer** tree and select **Changes**.
3. Modify the color and attribute by selecting different values listed under **Attributes** and **Color** dropdown.



4. Click **OK**. Make changes to the document and observe the changes.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Review the changes made in the document sent to you in the previous session.

ASSESSMENT

Answer the following

1. Explain the procedure to accept and rejecting changes made to a document.
2. Explain the procedure to modify markup appearance with an example.

Fill in the blanks

1. Accept or Reject option is available under _____ submenu of ____ dropdown menu.
2. To accept all changes in a document, you should select _____ from Accept or Reject Changes dialog box.

SESSION 10: MERGING DOCUMENT CHANGES

Learning Objectives:

At the end of this session, you will be able to:

- Merge documents.

RELEVANT KNOWLEDGE

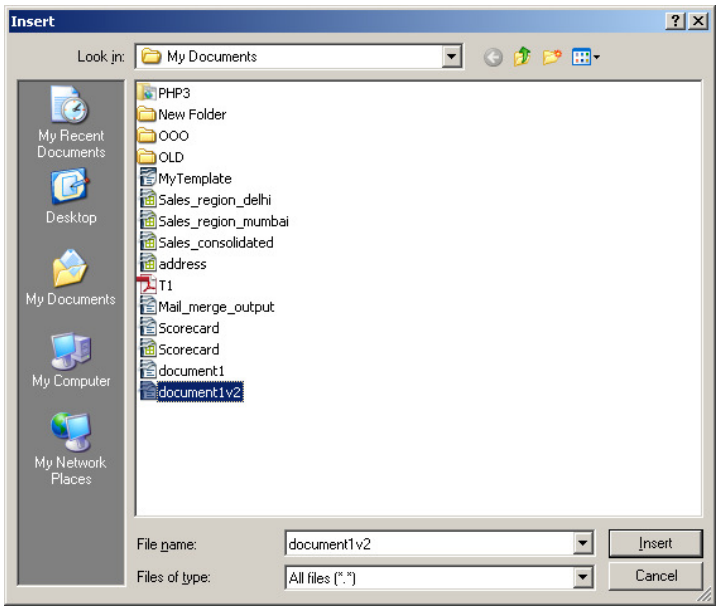
The review processes learnt till now are effective when you have one reviewer at a time working on a document. Sometimes, however, multiple reviewers return edited versions of a document at the same time. In this case, to save time, you may want to review all the changes in one go, rather than work on one review at a time. To do so, you can use the word processor feature that helps you merge multiple documents.

Consider another scenario: you may be working with multiple versions of a document and may need to compare different versions with the original to finalize the document. Here too, you can use the word processing software to compare each version of the document and merge different versions as one single final document! So much more simpler than a manual task!

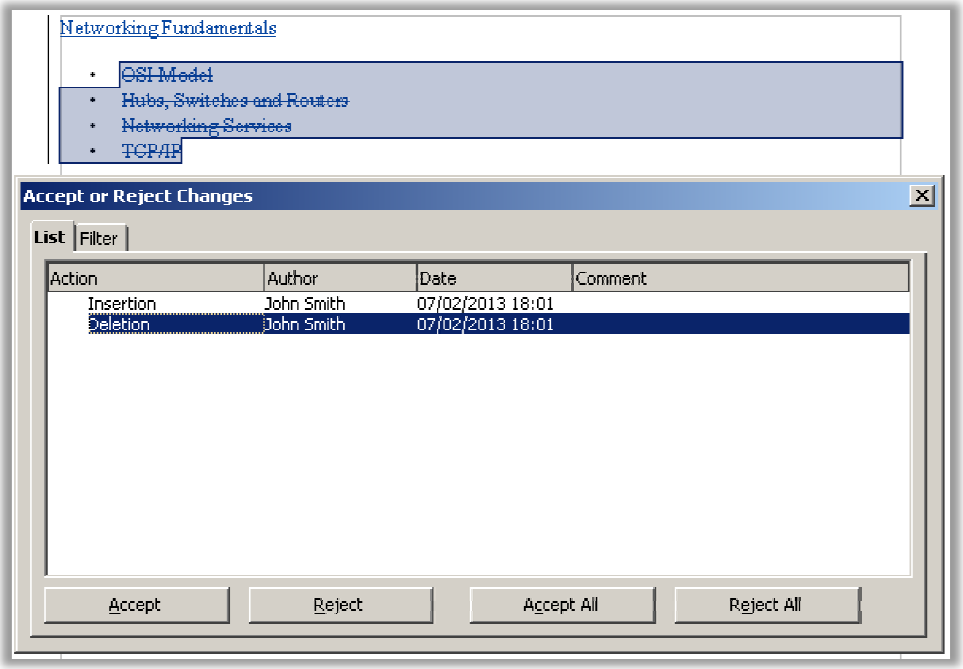
Comparing documents

To understand how to compare documents, do the following step by step:

1. Create a new document, type some content and save this as "**document1.odt**".
2. To enable tracking before you send this for review, select **Edit > Changes > Record**.
3. Modify the document by adding content and then select **File > Save As**…. Save this as "**document1v2.odt**". Close the document.
4. Now open the first document **document1.odt.**
5. Select **Edit > Compare Document**….An **Insert** dialog box appears as shown adjacent.
6. Browse and select the



second document **document1v2.odt** and click **Insert.** Observe the results displayed along with **Accept or Reject Changes** dialog box (figure below).



7. Notice the document displaying contents by comparing both the documents as a result which you may find some text stroked-out. Review each change and click **Accept** or **Reject** button.

Merging documents

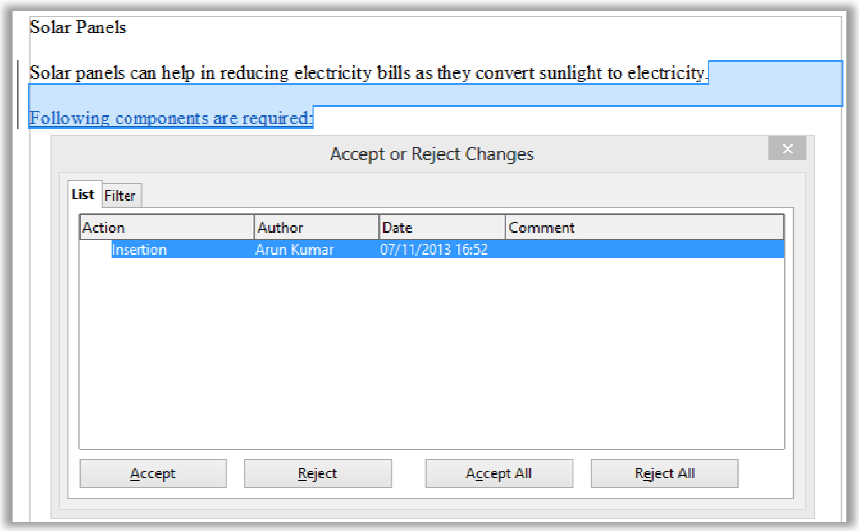
To understand merging documents, do the following:

1. Create a new text document.
2. Type some content and save this as "**article.odt**".
3. You need to enable tracking before sending this document to others for adding content, select **Edit > Changes > Record**.
4. Save the document.
5. Now send this document to your classmate to add more content and ask him/her to send the document back for review.

Once you receive the document save the file with a different file name (for example Articlev2.odt) to avoid confusion and do the following:

6. Open the original document (**article.odt**).
7. Select **Edit > Changes > Merge Document….** Browse and select the second document **(Articlev2.odt)** and click **Open.**
8. Observe the results displayed along with **Accept or Reject Changes** dialog box (figure below).

9. Observe the results displayed, review each item and select either **Accept** or **Reject**.



EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create an article on the following topics: a. Starting an online gift shop, stationary shop & grocery store (online shopping). b. Small Scale Industries • Provide an overview on selected topic and send the document to your classmate and ask him/her to prepare additional content. • Merge the documents once you receive the documents; review and accept the changes only if they are correct.

ASSESSMENT

Answer the following

1. Explain the procedure to merge documents.

Fill in the blanks

1. Compare Document option is available under _____ dropdown menu.
2. Merge Document options is available under _____ submenu of ____ dropdown menu.

SPREADSHEET

SESSION 1: ADDING HYPERLINKS

Learning Objectives:
You have learnt to open, create and populate spreadsheets. You have also learnt about the different data types, how to format cells, manipulate data using formulae, and create charts to graphically represent the data.

Now, in this module you will learn to use hyperlinks, pivot tables and pivot charts, compare, merge and protect spreadsheets. You will also learn to use digital signatures to protect spreadsheets.

RELEVANT KNOWLEDGE

As you already know, a hyperlink is a reference to a document, a location or an action that you can directly follow by selecting the link. You have learnt to insert and send hyperlinks in an e-mail message. You can use hyperlinks in spreadsheets too for the following:

- Providing hyperlinks to websites
- Listing e-mail addresses
- Providing a link to a specific worksheet or a document.

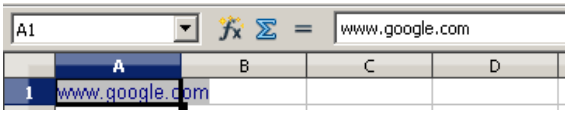
Create a hyperlink to a website

You can create list of hyperlinks in spreadsheets. This may be useful when you want collect and keep list of valuable resources such as websites for additional references, important email addresses, etc.

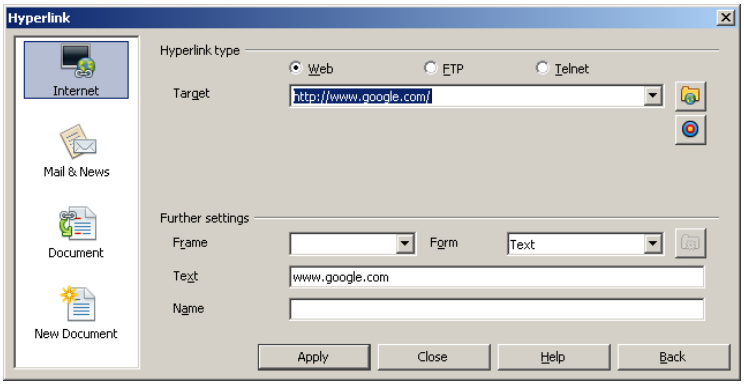
To create a hyperlink to a website, do the following:

1. Open a new worksheet in spreadsheet software.
2. Place the cursor where you want the hyperlink to be displayed, for example cell **A1**.
3. Type the URL, for example **www.google.com** and press **Enter**.
4. Notice the hyperlink automatically created and displayed (figure above).
5. To modify the hyperlink text, select the cell where the link is located. For example, **A1**. Notice the URL displayed in the formula bar.

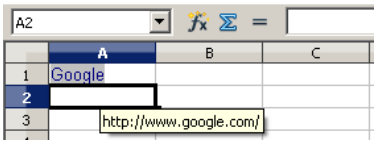




6. To modify the hyperlink, select the cell A1. Select **Insert > Hyperlink**. **Hyperlink** dialog box appears as shown adjacent.

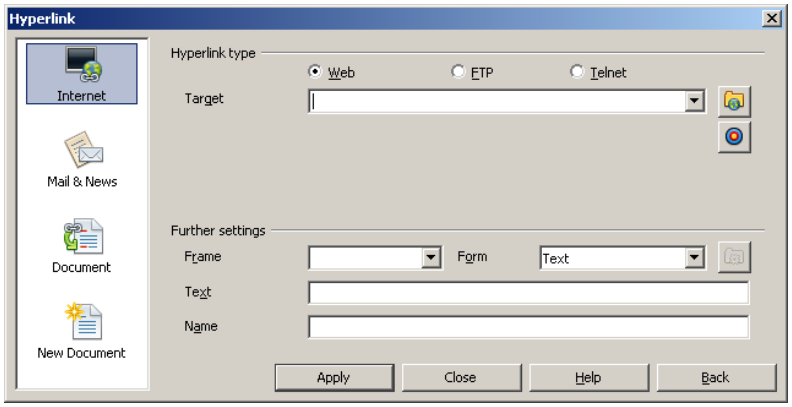


7. Replace **www.google.com** in **Text** textbox with **Google.**
8. Click **Apply** and then **Close.** Notice the text replaced in the cell **A1**.

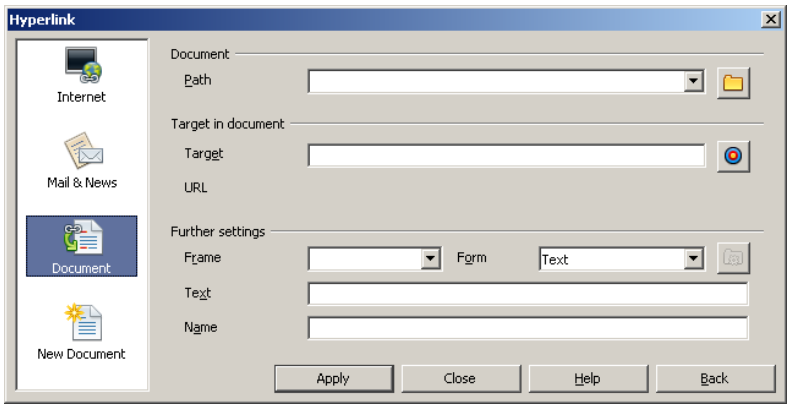


Creating a hyperlink to an existing document

You can create hyperlinks to documents available on your computer or another computer in your network. To create a hyperlink to a document on your computer, do the following:

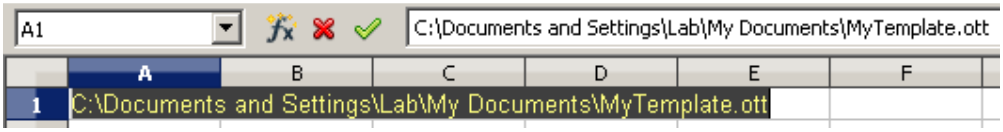


1. Open a new blank worksheet.
2. Place the cursor where you want the hyperlink to be displayed, for example cell **A1**.
3. Select **Insert** > **Hyperlink**. A **Hyperlink** dialog box appears (figure adjacent).



4. Select **Document** (in the left pane).
5. Click the folder icon , browse and select a file and click **Open**.

6. Click **Apply** and then **Close**. Notice the hyperlink to the document (figure below). Click on the link to open the document associated with corresponding application.

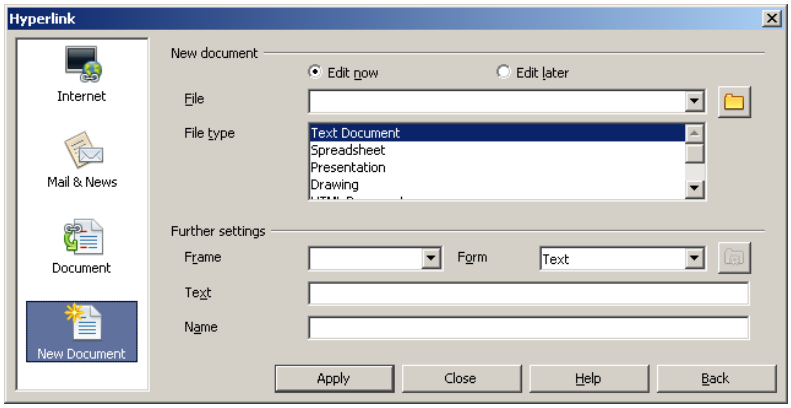


Note: To provide links to documents on a network, use the UNC path (example: \\COMPUTERNAME\SHARENAME\FOLDER\FILENAME).

Creating a hyperlink to a new document

You can also create documents while creating the hyperlink. This is useful when you want to create the document after creating the hyperlink.

1. Open a new blank worksheet. Place the cursor where you want the hyperlink to be displayed, for example cell ***A1***.



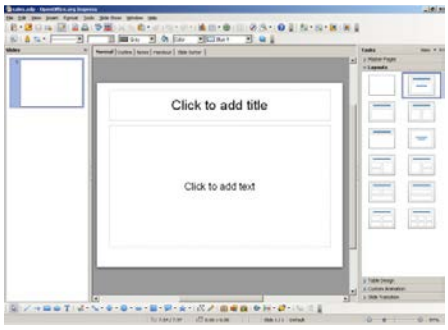
2. Select **Insert** > **Hyperlink**. The **Hyperlink** dialog box appears. Select **New Document** from left pane (figure above).
3. To create a **presentation** and also embed a link to the presentation, do the following:
    a. To work with the presentation after this step, select the option **Edit now**.

Note: If you want to edit the presentation at a later point in time, click **Edit Later**.

4. Note: To work with the presentation at a later point in time, select Edit later.
    a. Type a file name for this presentation in **File** textbox, for example **sales**.
    b. Select **Presentation** from **File type** list.
    c. Type some title in **Text** textbox, for example: **Beverage Campaign**.

5. Click **Apply** and then **Close**. Notice the link created and displayed (figure below, left). Also notice the presentation created and launched in a new window for further editing (figure below, right).





Editing documents after linking

You can edit the document after linking (or if you have used the **Edit Later** option), by doing the following:

1. Select the cell that has the hyperlink.
2. Click on the hyperlink to edit the document.
3. Close the external document once complete to return to this spreadsheet.

Creating a custom hyperlink using HYPERLINK()

Spreadsheet software includes a **HYPERLINK** function that is used for inserting hyperlinks in worksheets. The syntax of the HYPERLINK function is:

HYPERLINK("URL", "Friendly Name")

- Specify the location by replacing “URL”
- Type a name by replacing “Friendly name”.

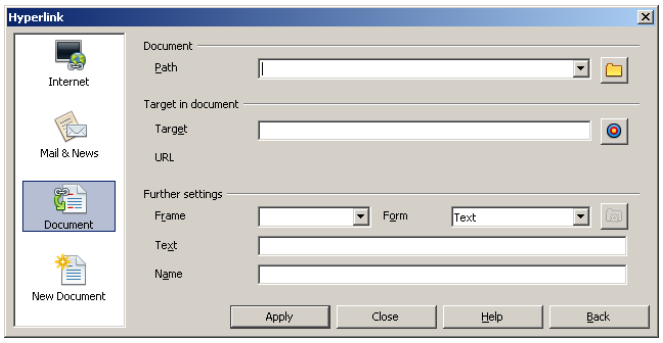
To include hyperlink to a document on a web server, do the following:

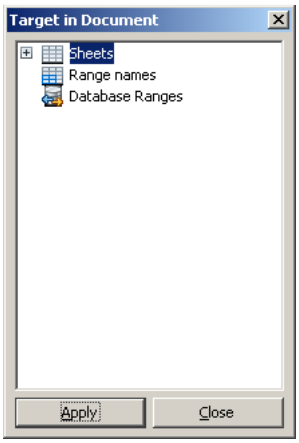
1. Open a new blank worksheet.
2. Place the cursor where you want the hyperlink to be displayed, for example cell **A1**.
3. Type **=HYPERLINK("http://docs.google.com/annual_report.xls"; "Annual Report").** Press **Enter**.

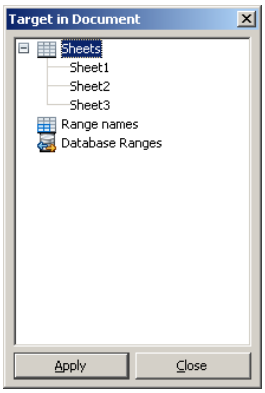
To include hyperlink to another sheet within a workbook, do the following:

1. Open a new blank workbook.
2. Place the cursor where you want the hyperlink to be displayed, for example cell **A1, Sheet 1**.
3. Select **Insert**>**Hyperlink**. A **Hyperlink** dialog box appears.

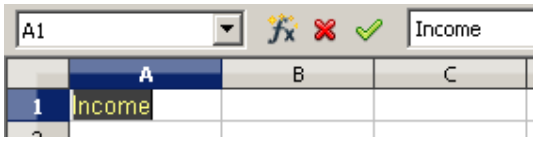
4. Select **Document** from the left pane.
5. Select **Target in document** icon. A **Target in Document** popup appears (figure below left).
6. Expand **Sheets** (figure below right).
7. Select the sheet name, for example Sheet 3.







8. Click **Apply** and then **Close**.
9. Type **Income** in the **Text** textbox. Click **Apply** and then **Close**. Notice the link created and displayed in Sheet 1 (figure adjacent).



Linking data from another workbook

You can link data from different workbooks. This could be useful in situations when you want to consolidate data from other workbooks. For example if you have separate sales report for each region, you can summarize consolidated data in a separate workbook. Now, to understand how to link spreadsheets, you will create three workbooks. Two of them contain data (new and existing clients) of specific regions, while the third consolidates all together.

1. Create a workbook similar to the one below:

	A	B	C	D
1	3G Data Plan	Existing Customers	New Customers	Total
2	Prepaid, 3 Days 100 MB	230	300	530
3	Prepaid, 15 Days 250 MB	120	250	370
4	Prepaid, 1 Month 500 MB	104	650	754
5	Postpaid, 1GB	122	175	297
6	Postpaid, 5GB	322	223	545

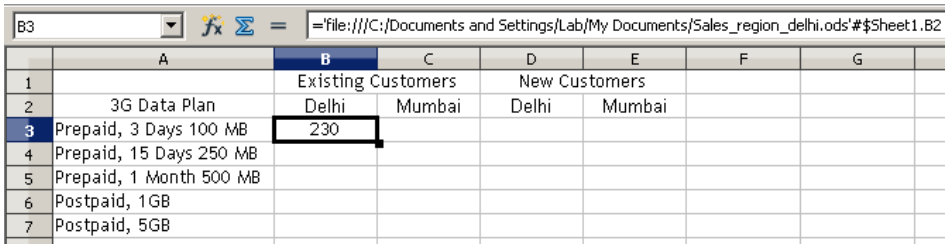
2. Save this workbook, for example: **Sales_region_delhi.ods**.
3. Create another workbook similar to the one below:

	A	B	C	D
1	3G Data Plan	Existing Customers	New Customers	Total
2	Prepaid, 3 Days 100 MB	120	97	217
3	Prepaid, 15 Days 250 MB	32	87	119
4	Prepaid, 1 Month 500 MB	334	654	988
5	Postpaid, 1GB	75	34	109
6	Postpaid, 5GB	59	54	113

4. Save this workbook with a different name, for example: **Sales_region_mumbai.ods**.
5. Now to consolidate into a single worksheet, create a new spreadsheet similar to the one below (save this workbook as **Sales_consolidated.ods**):

	A	B	C	D	E
1		Existing Customers		New Customers	
2	3G Data Plan	Delhi	Mumbai	Delhi	Mumbai
3	Prepaid, 3 Days 100 MB				
4	Prepaid, 15 Days 250 MB				
5	Prepaid, 1 Month 500 MB				
6	Postpaid, 1GB				
7	Postpaid, 5GB				

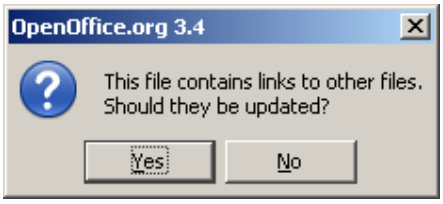
   a. Open **Sales_region_delhi.ods**.
   b. Switch to **sales_consolidated.ods** workbook. Place the cursor in cell **B3**.
   c. Type =, switch to the first spreadsheet (**Sales_region_delhi.ods**) and select Cell **B2**. Press **Enter**. Notice the value displayed (notice the reference in the formula bar) from the first spreadsheet to this consolidated sheet (figure below).



d. Repeat the procedure for rest of the cells (**B4 to B7& D3 to D7**).
e. Open **Sales_region_mumbai.ods**.
f. Switch to **sales_consolidated.ods** workbook; place the cursor in cell **C3**.
g. Type =, switch to the first spreadsheet and select Cell **B2**. Press **Enter**. Notice the value displayed from the first spreadsheet to this consolidated sheet.
h. Repeat the procedure for rest of the cells (**C3 to C7** and **E3 to E7**).
i. You should see a result similar to the one below.

	A	B	C	D	E
1		Existing Customers		New Customers	
2	3G Data Plan	Delhi	Mumbai	Delhi	Mumbai
3	Prepaid, 3 Days 100 MB	230	120	300	97
4	Prepaid, 15 Days 250 MB	120	32	250	87
5	Prepaid, 1 Month 500 MB	104	334	650	654
6	Postpaid, 1GB	122	75	175	34
7	Postpaid, 5GB	322	59	223	54

j. Save the consolidated workbook.



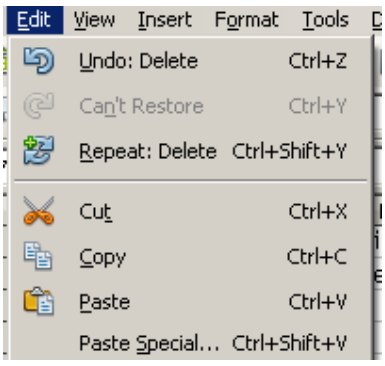
Now if you make changes to the first and second spreadsheets, data will be automatically updated in the consolidated worksheet. If you close and open the consolidated worksheet, you may receive a message similar to the one adjacent.

Click **Yes** to update the data from both **Sales_region_delhi.ods** & **Sales_region_mumbai.ods** workbooks.

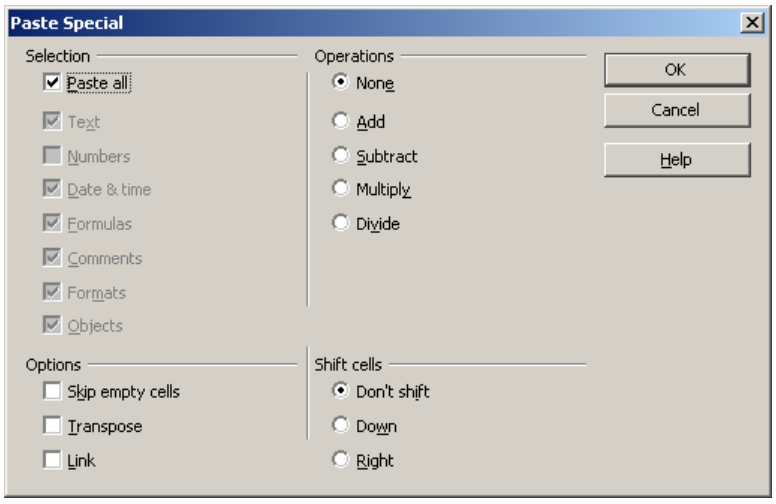
Note: Since the consolidated workbook depends on the other two workbooks, both the workbooks must be present in the same location and file names must not be altered (If file names are changed, you will need to update the consolidated sheet manually).

Alternate method to link

1. Open the first spreadsheet (i.e. **Sales_region_delhi.ods**).
2. Select the cells that you want to link, for example select **B2** to **B6**. Select **Edit >Copy** (or **CTRL+C**).
3. Switch to the consolidated workbook. Place the cursor where you want this data to be available, for example select Cell **B3**.
4. Select **Edit > Paste Special…**.



5. **Paste Special** dialog box appears. Check **Link** (figure below).



6. Click **OK**. Notice the content in cells **B3 to B7** is pasted as a link.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a spreadsheet similar to the one below: A1: Roll Number, B1: Student Name, C1: Subject 1, D1: Subject 2, E1: Subject 3, F1: Average Rename Subject 1, 2 & 3 to actual subject names. a. Populate this sheet with roll numbers, names and scores of your friends. b. Calculate the average.
2.	Create another spreadsheet in the same workbook similar to the one below and name the sheet as "Consolidated Average Score". A1: Roll Number, B1: Student Name, C1: Average a. Display the average value in this sheet as hyperlinks.
3.	Create a spreadsheet similar to the one below:

	A	B	C	D	E	F
1	Part-time Job Tracker					
2	Company	Position	Wages Per Hour	Contact Number	Website	Email Addres
3						
4						
5						
6						
7						

Add additional fields such as Location, Mobile Number and timing to the right.

a. Populate the website and email address fields as hyperlinks using Hyperlink function.

ASSESSMENT

Answer the following

1. Explain the procedure to include hyperlinks in spreadsheets with different examples.

Fill in the blanks

1. To modify a hyperlink, you should select _____ from context menu (right-click).
2. Hyperlink function syntax: _____ .

SESSION 2: ANALYZING DATA USING PIVOT TABLES

Learning Objectives:
At the end of this session, you will be able to:

- Analyze data using pivot tables and pivot charts.

RELEVANT KNOWLEDGE

One of the most important and widely used features of spreadsheet software is Pivot tables and charts. Pivot tables and charts help in analysing large sets of data to make business decisions.

For example, if a company has a large amount of data such as details of products sold across different locations, a pivot table can be used to analyse products that are sold the most at a particular location. This may help the company to understand the reason for high sales and replicate the same strategy in other locations.

Pivot Table

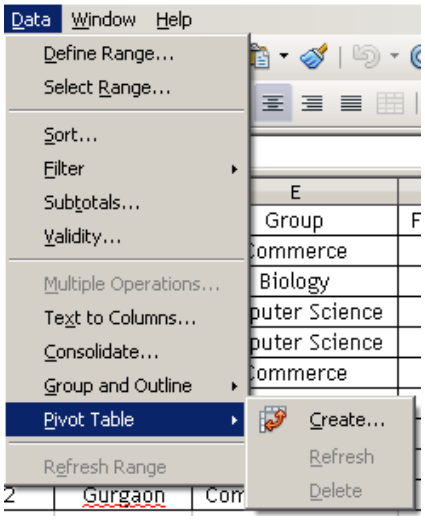
Pivot tables are summaries of data from a database such as a spreadsheet. Using Pivot tables, you can sort, count or view average of data stored in a spreadsheet or a different spreadsheet. Pivot tables help you quickly build reports because you can easily sort and visualize large amount of data. Pivot tables also allow you to change how your data is summarized with the least amount of effort (no complicated formulae changes in several places!).

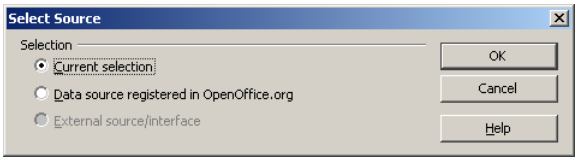
To understand how to use a Pivot table, do the following:

1. Create a spreadsheet similar to the one below:

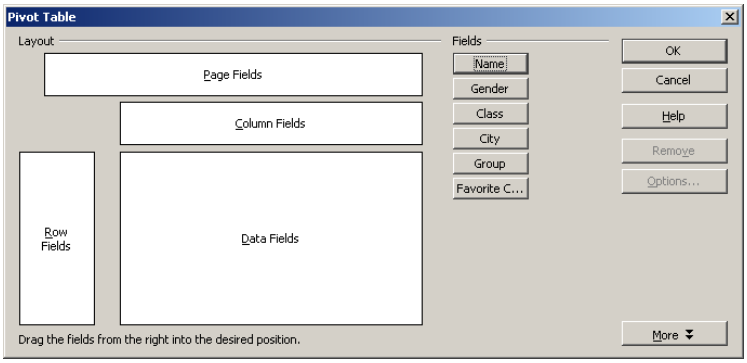
	A	B	C	D	E	F
1	Name	Gender	Class	City	Group	Favorite Color
2	Ram	Male	10	Bangalore	Commerce	Blue
3	Rohan	Male	12	Bangalore	Biology	Green
4	Swetha	Female	11	Mumbai	Computer Science	Green
5	Sharma	Male	10	Kolkata	Computer Science	Orange
6	Aishwarya	Female	12	Bangalore	Commerce	Black
7	Preethi	Female	9	Gurgaon	Commerce	Blue
8	Verma	Male	12	Chennai	Biology	Green
9	Reshma	Female	10	Bangalore	Biology	Orange
10	Shalini	Female	12	Gurgaon	Computer Science	White

2. Place the cursor in cell **A1**. Select **Data** dropdown menu (figure below left).
3. Select **Pivot Table**, click **Create…. Select Source** dialog box appears as shown below (right).

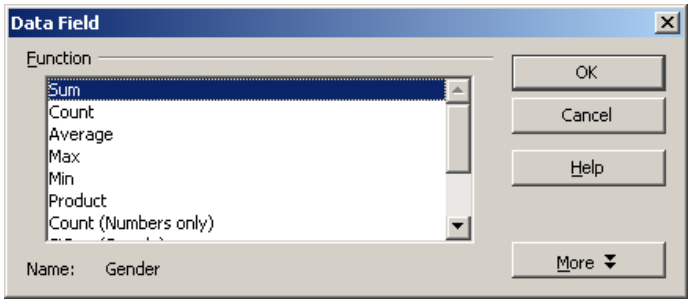




4. Notice the range A1 to F10 is selected in the background. Since we need to use the entire range, click **OK**. A **Pivot Table** dialog box appears (figure below). You need to define what you need to analyse based on the data available here. Some of the common questions could be:
    a. How many of the total students are male (or female)?
    b. How many of them are from Bangalore?
    c. How many of them have their major as commerce?
    d. Which is the most preferred color?



5. For example to view the total count of **Gender**, do the following:
    a. Drag and drop **Gender** (button) in **Row Fields.** Doing so will create a list box that can be used for filtering items from the list box.
    b. Drag and drop **Gender** (button) in **Data Fields.**
    c. Click **Options…** button. A **Data Field** dialog box appears as shown adjacent.



d. Select **Count** and click **OK** twice. Notice the Pivot table added to the worksheet (figure adjacent).

12	Filter	
13		
14	Gender	
15	Female	5
16	Male	4
17	Total Result	9

Notice both male and female are displayed as categories along with individual count. Imagine the effort needed to filter and calculate the total count manually from a spreadsheet that had thousands of records! Using pivot tables, you can quickly get a summary of details from exhaustive data in no time! For example, an organization promoting a product for a particular gender could quickly come to a decision based on the summary.

Now to display the count of students location-wise, do the following:

1. Place the cursor in cell **A1**. Select **Data**>**Pivot Table> Create**….
2. **Select Source** dialog box appears, click **OK**. **Pivot Table** dialog box appears.
   a. Drag and drop **City** (button) in **Row Fields**
   b. Drag and drop **City** (button) in **Data Fields**
   c. Click **Options**… button. **Data Field** dialog box appears.
   d. Select **Count** and click **OK** twice.
3. Notice the results displayed in the pivot table (figure adjacent). If you observe, the total count of students are displayed with city-wise breakup.

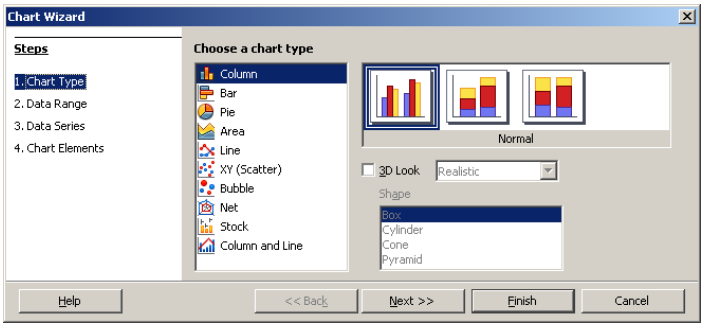
12	Filter	
13		
14	City	
15	Bangalore	4
16	Chennai	1
17	Gurgaon	2
18	Kolkata	1
19	Mumbai	1
20	Total Result	9

This form of analysis enables making quick decisions. For example, the count helps you to conclude that the maximum number of students is from Bangalore. This helps you select the first location (ensuring maximum coverage) for a marketing campaign targeting students.

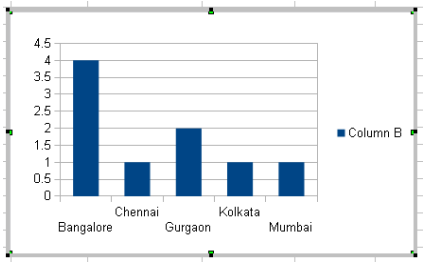
Creating a chart from a pivot table

A chart provides a visual representation of data. To create a chart from a pivot table, do the following:

1. Select the range, for example **A15:B19**.
2. Select **Insert > Chart**….
3. A **Chart Wizard** dialog box appears (figure adjacent).



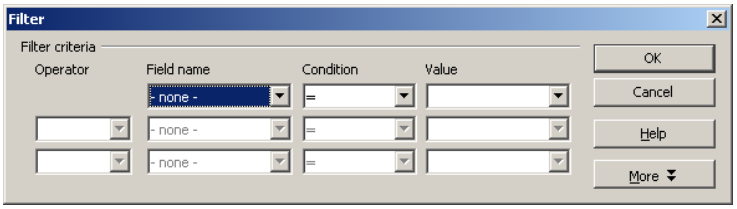
4. Click **Finish**. Notice a chart created (figure adjacent) based on the data in the pivot table.



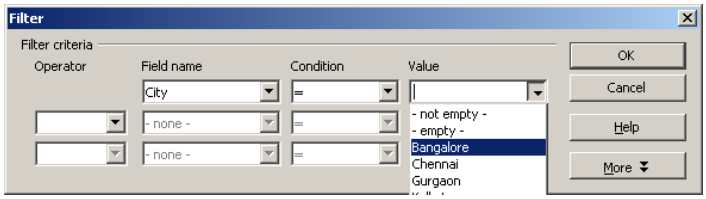
Applying Filters

You can apply filters to display selective data. For example if you want to display data only for selected cities, do the following:

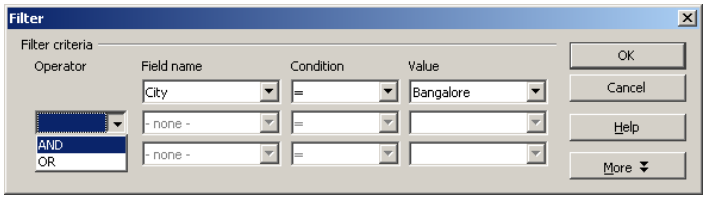
1. Click **Filter** Button located above the Pivot Table. **Filter** dialog box appears as shown adjacent.



2. To display data only for Bangalore & Gurgaon, do the following:
   a. Select the dropdown arrow under **Field name**, select **City**.
   b. Select the dropdown arrow under **Value**, notice the values in this list.



   c. Select **Bangalore**.
   d. Select the dropdown arrow under **Operator** and select **OR**.



   e. Select the dropdown arrow under **Field name**, select **City**.
   f. Select the dropdown arrow under **Value**, select **Gurgaon**.
   g. Click **OK**. Notice the filtered results displayed (figure adjacent).

12	Filter	
13		
14	City	
15	Bangalore	4
16	Gurgaon	2
17	Total Result	6

You can also filter to find out the total number of male students from a particular city. For example, to filter and list the number of male students from Bangalore, do the following:

1. Click **Filter** Button located above the Pivot Table. **Filter** dialog box appears.
2. Select the dropdown arrow under **Operator,** select AND.
3. Select the dropdown arrow under **Field name**,

12	Filter	
13		
14	City	
15	Bangalore	2
16	Total Result	2

select **Gender**.

4. Select the dropdown arrow under **Value**, select **Male**.
5. Click **OK**. Notice the results displayed (figure above).

EXERCISE

Perform the following activities till you are confident:

S.No. | **Activities**

1.

Create a spreadsheet with the data given below.

Create a Pivot Table for the following:

Month/Year	Item	Sales Person	Qty.	Unit Cost	Sales
Jan/13	Washing Machine – Semi Auto	Asha	12	7000	84000
Jan/13	Washing Machine – Full Auto	Kumar	15	18000	270000
Jan/13	Dishwasher	David	5	33000	165000
Jan/13	Microwave	Kumar	30	4500	135000
Jan/13	Refrigerator – Standard	Kumar	15	5500	82500
Feb/13	Refrigerator – Double Door	Kumar	17	12300	209100
Feb/13	LED 27" TV	David	9	55000	495000
Feb/13	Air Conditioner – Window 1.5 Ton	Asha	8	17000	136000
Feb/13	Air Conditioner – Split 1.5 Ton	Asha	22	28000	616000
Feb/13	Washing Machine – Semi Auto	David	10	7000	70000
Feb/13	Washing Machine – Full Auto	Asha	32	18000	576000
Feb/13	Dishwasher	Kumar	10	33000	330000
Mar/13	Microwave	Asha	34	4500	153000
Mar/13	Refrigerator – Standard	David	23	5500	126500
Mar/13	Refrigerator – Double Door	Kumar	34	12300	418200
Mar/13	LED 27" TV	Asha	10	55000	550000
Mar/13	Air Conditioner – Window 1.5 Ton	Asha	7	17000	119000
Mar/13	Air Conditioner – Split 1.5 Ton	Kumar	12	28000	336000
Apr/13	Air Conditioner – Window 1.5 Ton	Asha	3	17000	51000
Apr/13	Air Conditioner – Split 1.5 Ton	Asha	12	28000	336000
Apr/13	Washing Machine – Semi Auto	David	4	7000	28000
Apr/13	Washing Machine – Full Auto	Asha	34	18000	612000
Apr/13	Dishwasher	Kumar	23	33000	759000
May/13	Microwave	Asha	12	4500	54000
May/13	Refrigerator – Standard	David	43	5500	236500
May/13	Refrigerator – Double Door	Kumar	7	12300	86100
May/13	LED 27" TV	Asha	52	55000	2860000
May/13	Air Conditioner – Window 1.5 Ton	Asha	18	17000	306000
May/13	Air Conditioner – Split 1.5 Ton	Kumar	23	28000	644000

a. Display the count of Items sold by quantity.

	b. Display the quantity of items sold by each sales person. c. Display the Item / Quantity sold. d. Calculate the total Sales by Asha, Kumar and David.

ASSESSMENT

Answer the following

1. Explain the purpose of Pivot Table.
2. Explain the procedure to create pivot table from a sample data.

Fill in the blanks

1. Widely used features of spreadsheet software are _____ and _____.
2. _____ are summaries of data from a database such as a spreadsheet.
3. Pivot Table is available in _____ dropdown menu.

SESSION 3: CREATE PIVOT CHARTS

Learning Objectives:

At the end of this session, you will be able to:

- Create and use pivot charts.

RELEVANT KNOWLEDGE

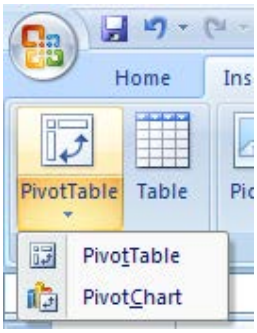
Pivot Charts

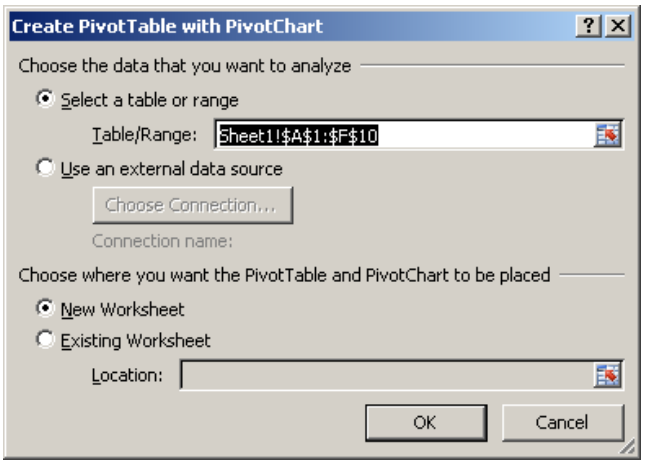
You can create pivot charts in addition to pivot tables using **Microsoft Excel**. As you know, charts help you visualize and understand complex data, easily. However, pivot charts are more useful than ordinary charts, because they are more easily manipulated to show different information as summaries. Moreover, a pivot chart can be moved / placed anywhere within a workbook or a different workbook , as per your requirement. In this session, you will learn about Pivot charts.

To create a pivot chart, do the following:

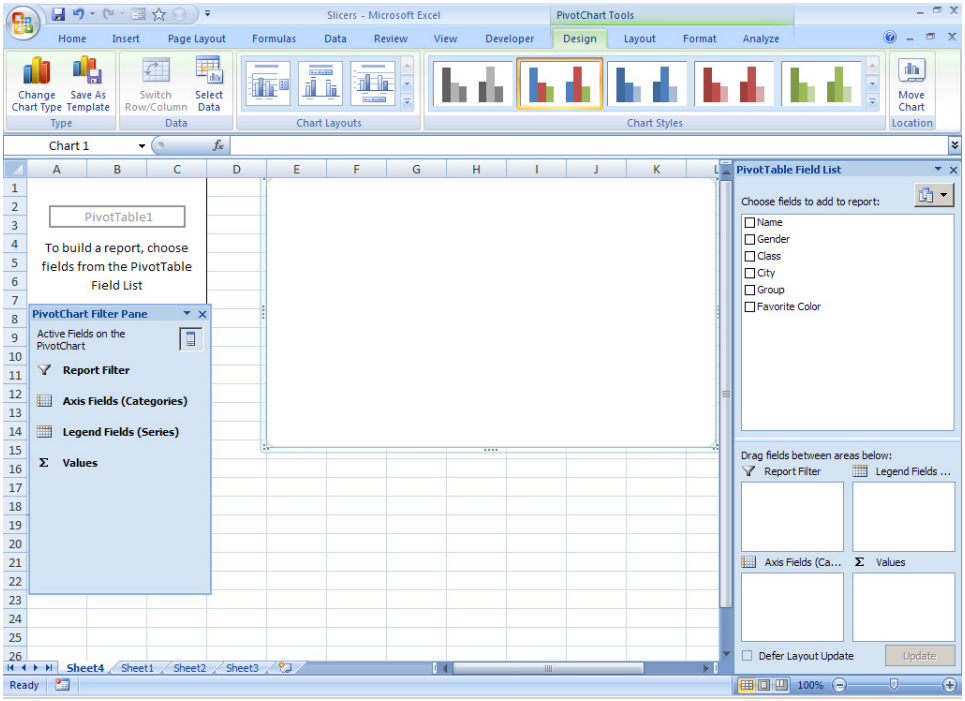
1. Create a new spreadsheet with the adjacent data:
2. Select the data range, **A1:F10**.
3. Select the **Insert** > **PivotTable** dropdown arrow (figure below left).
4. Select the option **PivotChart**. A **Create PivotTable with PivotChart** dialog box appears (-figure below right).

	A	B	C	D	E	F
1	Name	Gender	Class	City	Group	Favorite Color
2	Ram	Male	10	Bangalore	Commerce	Blue
3	Rohan	Male	12	Bangalore	Biology	Green
4	Swetha	Female	11	Mumbai	Computer Science	Green
5	Sharma	Male	10	Kolkata	Computer Science	Orange
6	Aishwarya	Female	12	Bangalore	Commerce	Black
7	Preethi	Female	9	Gurgaon	Commerce	Blue
8	Verma	Male	12	Chennai	Biology	Green
9	Reshma	Female	10	Bangalore	Biology	Orange
10	Shalini	Female	12	Gurgaon	Computer Science	White

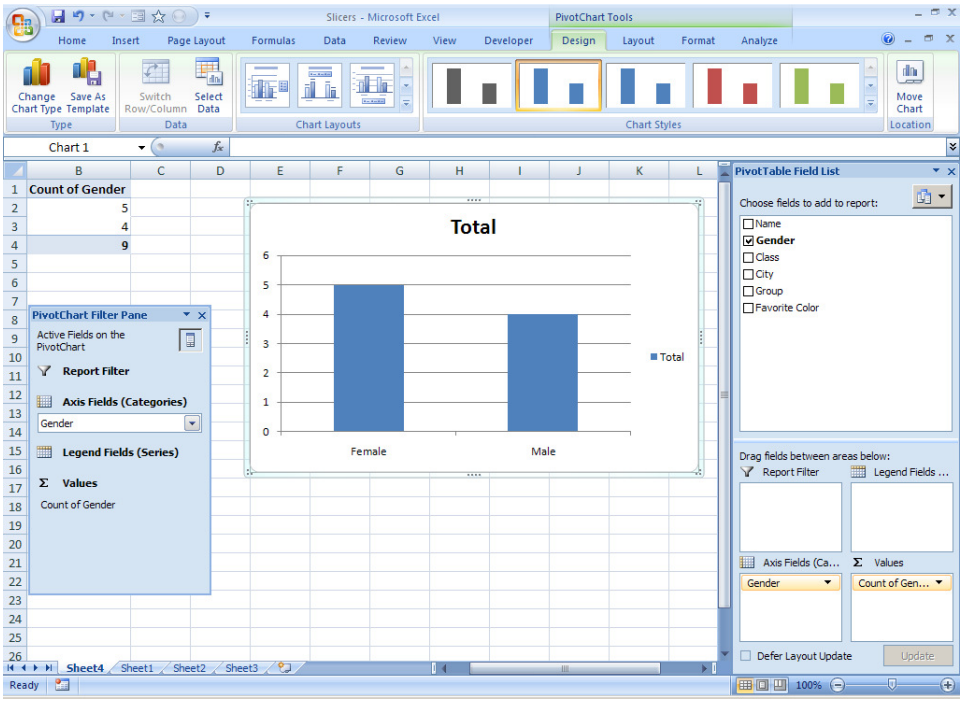




5. Click **OK**. A new worksheet is created and displayed (figure below).



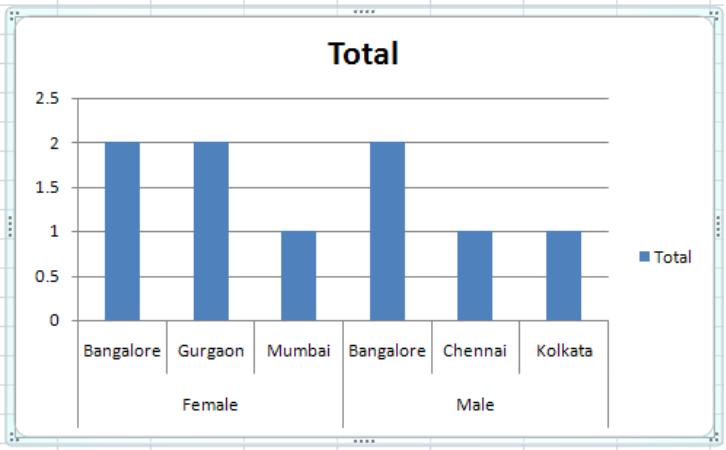
6. Drag and drop **Gender** from **Choose Fields to add to report:** to **Axis Fields Categories** and **Values**. Notice a chart is created (figure below).



7. You can also include other fields to this PivotChart. For example, if you want to visualize the breakup of Gender City-wise, select **City** from

Choose Fields to Add to report: and add that to **Axis Fields Categories and Values.** Notice the updated chart displayed (figure below).

If you observe, data is now displayed graphically separated by city showing a clear break-up of Gender, city-wise. PivotChart can help in visualizing data quickly as compared to PivotTable.



Though you have learnt the basics of PivotChart, it is recommended that you refer the help file or tutorials on the Internet.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities

1. Create a spreadsheet using the following data in Excel 2010:

Month/Year	Item	Sales Person	Qty.	Unit Cost	Sales
Jan/13	Washing Machine - Semi Auto	Asha	12	7000	8400
Jan/13	Washing Machine - Full Auto	Kumar	15	18000	27000
Jan/13	Dishwasher	David	5	33000	16500
Jan/13	Microwave	Kumar	30	4500	13500
Jan/13	Refrigerator - Standard	Kumar	15	5500	8250
Feb/13	Refrigerator - Double Door	Kumar	17	12300	20910
Feb/13	LED 27" TV	David	9	55000	49500
Feb/13	Air Conditioner - Window 1.5 Ton	Asha	8	17000	13600
Feb/13	Air Conditioner - Split 1.5 Ton	Asha	22	28000	61600
Feb/13	Washing Machine - Semi Auto	David	10	7000	7000
Feb/13	Washing Machine - Full Auto	Asha	32	18000	57600
Feb/13	Dishwasher	Kumar	10	33000	33000
Mar/13	Microwave	Asha	34	4500	15300
Mar/13	Refrigerator - Standard	David	23	5500	12650
Mar/13	Refrigerator - Double Door	Kumar	34	12300	41820
Mar/13	LED 27" TV	Asha	10	55000	55000
Mar/13	Air Conditioner - Window 1.5 Ton	Asha	7	17000	11900
Mar/13	Air Conditioner - Split 1.5 Ton	Kumar	12	28000	33600
Apr/13	Air Conditioner - Window 1.5 Ton	Asha	3	17000	5100
Apr/13	Air Conditioner - Split 1.5 Ton	Asha	12	28000	33600
Apr/13	Washing Machine - Semi Auto	David	4	7000	2800

Apr/13	Washing Machine – Full Auto	Asha	34	18000	612000
Apr/13	Dishwasher	Kumar	23	33000	759000
May/13	Microwave	Asha	12	4500	54000
May/13	Refrigerator – Standard	David	43	5500	236500
May/13	Refrigerator – Double Door	Kumar	7	12300	86100
May/13	LED 27" TV	Asha	52	55000	2860000
May/13	Air Conditioner – Window 1.5 Ton	Asha	18	17000	306000
May/13	Air Conditioner – Split 1.5 Ton	Kumar	23	28000	644000

Create PivotChart for displaying the following:

a. Sales made by sales persons.
b. Items sold in quantity.
c. Items & total sales.

ASSESSMENT

Answer the following

1. Explain the purpose of Pivot Chart.
2. Explain the procedure to create a pivot chart from a sample data.

Fill in the blanks

1. _____ provides a visual representation of data.
2. PivotTable is available in _____ group of _____ tab.

SESSION 4: FILTER DATA USING SLICERS

Learning Objectives:
At the end of this session, you will be able to:

- Use slicers to analyze data.

RELEVANT KNOWLEDGE

Slicers are one-click controls introduced in Microsoft Excel 2010 that can display data interactively when using pivot tables. Slicers can be used to display data interactively data i.e. when you apply a filter, data changes dynamically.

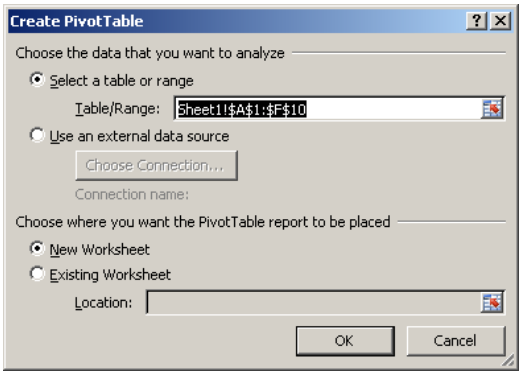
A slicer is like an extension of a pivot table making filtering of data even more easy in the following ways:

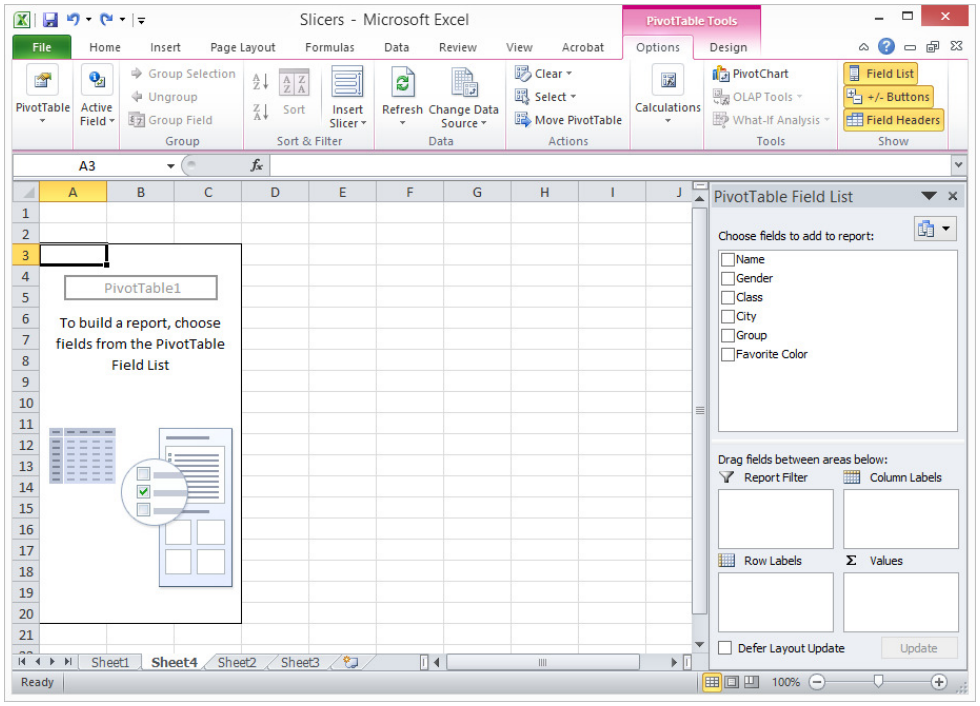
- Instead of using the drop down lists in the pivot table headings, you can click on a Slicer, to quickly filter the pivot table.
- You can place a slicer anywhere you want on the spreadsheet and without moving the pivot table.

Create a pivot table

The first step to using a Slicer is to create a pivot table. Open the spreadsheet created in the previous session. Then do the following:

1. Select the data range, **A1:A10 to F1:F10**.
2. Select **Insert** tab > **PivotTable > PivotTable**. A **Create PivotTable** dialog box appears (figure adjacent).
3. Click **OK.** A new worksheet is created (figure below).



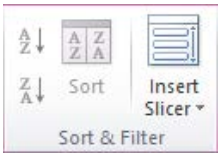


4. **To view** count of gender, city-wise, do the following:
    a. Select **Gender** from **Choose Fields to add to report:**, drag and drop it to **Row Labels** and **Values**.
    b. Select **City** from **Choose Fields to add to report:**, drag and drop it to **Row Labels** and **Values**. Observe the results (figure adjacent)

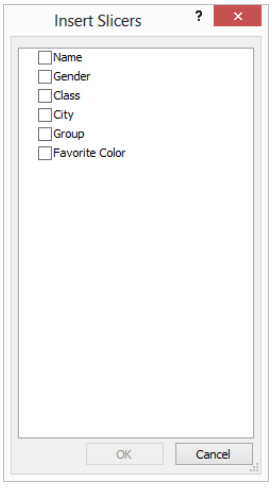
3		Values	
4	Row Labels	Count of Gender	Count of City
5	**Female**	**5**	**5**
6	Bangalore	2	2
7	Gurgaon	2	2
8	Mumbai	1	1
9	**Male**	**4**	**4**
10	Bangalore	2	2
11	Chennai	1	1
12	Kolkata	1	1
13	**Grand Total**	**9**	**9**

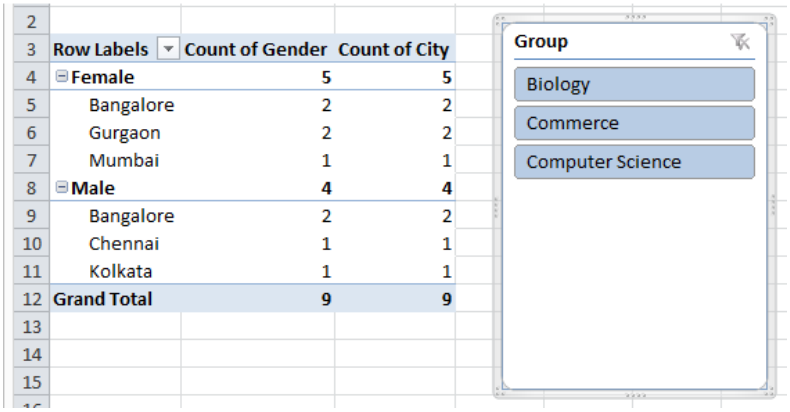
Applying Slicer

Now you can apply Slicer to analyse data. To apply slicer, do the following



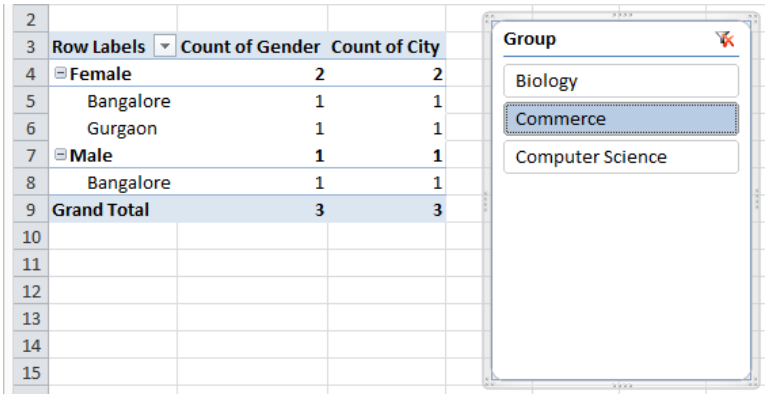
1. Select **Options** tab.
2. Select **Insert Slicer** dropdown arrow under **Sort & Filter** group
3. Select **Insert Slicer** from **Insert Slicer** dropdown menu. **Insert Slicers** dialog box appears (figure adjacent).
4. **Insert Slicers** dialog box displays all the headers available; Check **Group** from this list and click **OK**. A popup appears similar to the one below.





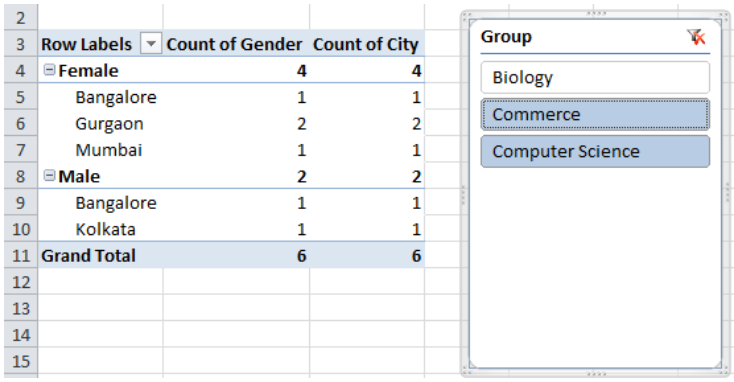
Row Labels	Count of Gender	Count of City
Female	5	5
Bangalore	2	2
Gurgaon	2	2
Mumbai	1	1
Male	4	4
Bangalore	2	2
Chennai	1	1
Kolkata	1	1
Grand Total	9	9

5. Now to quickly filter by a group, click on the group name in this list. For example, click **Commerce**. Notice the PivotTable displaying **Gender** and **City** count only for **Commerce** group (figure below).



Row Labels	Count of Gender	Count of City
Female	2	2
Bangalore	1	1
Gurgaon	1	1
Male	1	1
Bangalore	1	1
Grand Total	3	3

6. Now to know the gender-wise and city-wise count for both **Commerce AND Computer Science**, select both **Commerce** *AND* **Computer Science** from group (to select multiple items, use **CTRL + Click**). Observe the results displayed (figure adjacent).



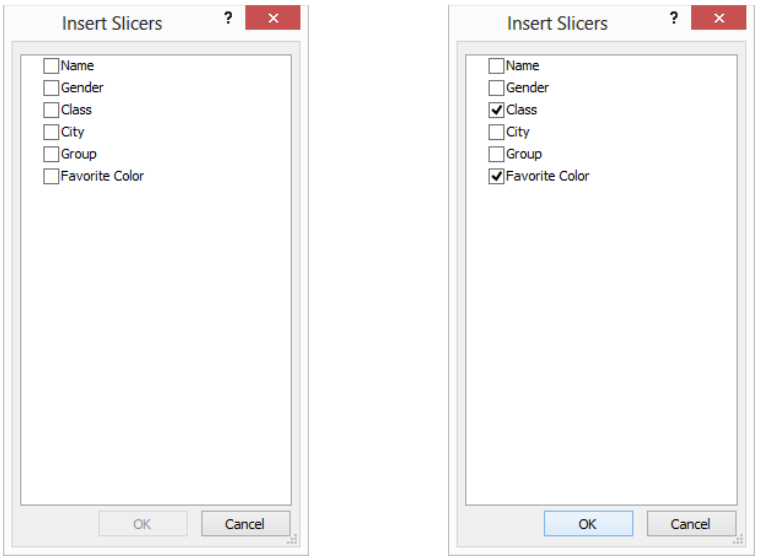
Row Labels	Count of Gender	Count of City
Female	4	4
Bangalore	1	1
Gurgaon	2	2
Mumbai	1	1
Male	2	2
Bangalore	1	1
Kolkata	1	1
Grand Total	6	6

You can also include slicers for multiple headers; this could be useful in situations when you large amount of data with multiple headers and need to quickly view filtered data.

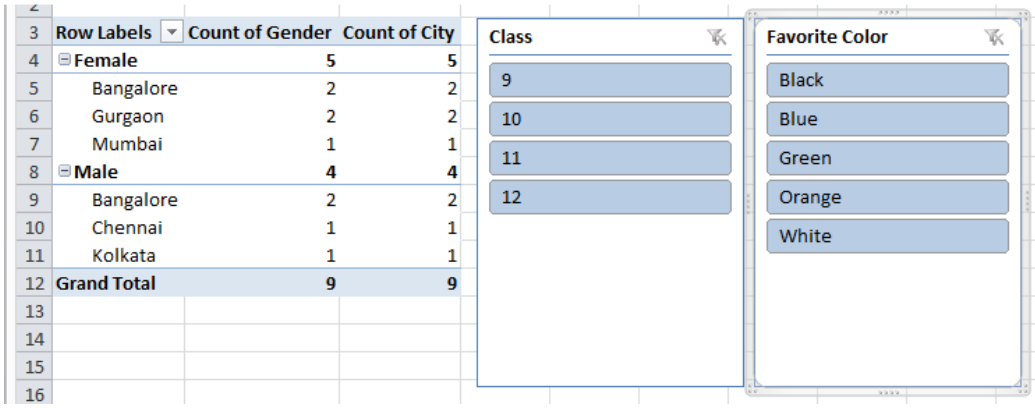
To use multiple headers, do the following:

1. Delete the slicer (for example, select **Group** popup and delete).

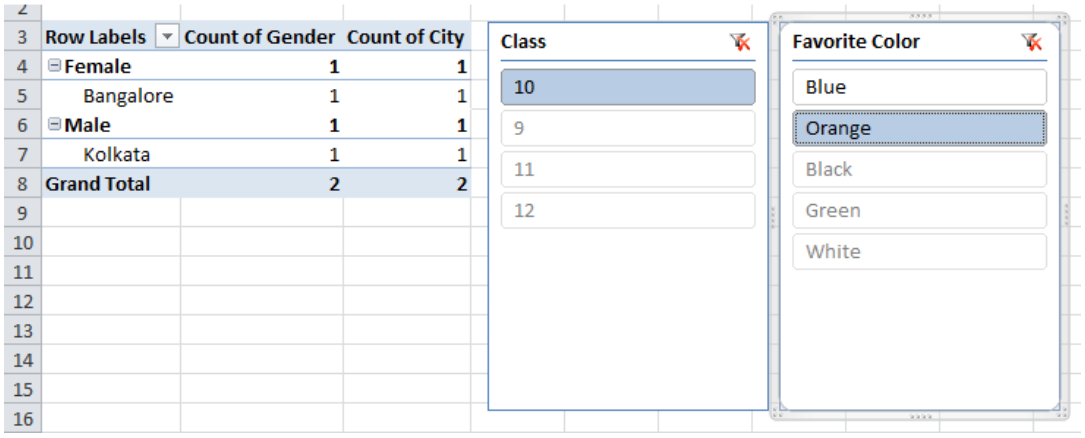
2. Select **Options > Insert Slicer > Insert Slicer**. An **Insert Slicers** dialog box appears (figure below, left).



3. Check **Class** and **Favorite Color** (figure above, right). Click **OK**. Observe the results displayed (figure below).



4. Now you can filter just by a single click. For example, if you want to know the count of the **Gender** (of each city) that are from class **10th** who prefer **Orange** color, select **10** from **Class** and **Orange** from **Favorite color**. Observe the results displayed (figure below).



Observe how quickly you can visualize data; imagine if you have hundreds or thousands of records that need to be analyzed. In such cases, both PivotTable and PivotChart can be of great help in analyzing data quickly. Now select other values from Class and Favorite color and observe the results.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Use the spreadsheet created in the previous session and do the following: a. Create PivotTable to include Items sold by Qty. b. Include the following items as filter slicers: i. Sales Person ii. Month/Year

ASSESSMENT

Answer the following

1. Explain the purpose of Filter Slicers.
2. Explain the procedure to apply slicers to a sample data.

Fill in the blanks

1. Slicer is a feature introduced in Microsoft Excel _____.
2. Insert Slicer option is available in _____ group under _____ tab.

SESSION 5: SET REVISION TRACKING & REVIEW TRACKED REVISIONS

Learning Objectives:
At the end of this session, you will be able to:

- Track and review spreadsheets.

RELEVANT KNOWLEDGE

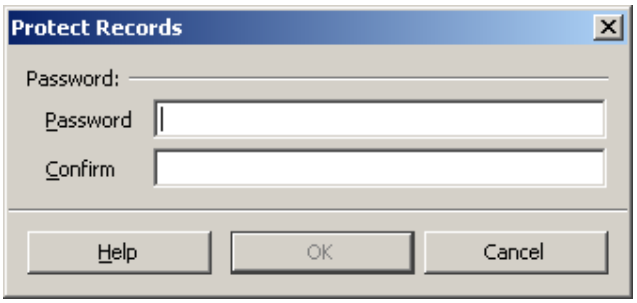
In a work place, a workbook may be edited by multiple users, with each one making several changes in different places. In such a situation, it may be difficult to follow or track which entries were made by whom and when. As a solution, you can use the tracking feature of a spreadsheet to track all changes made.

For example if you are collecting donation as a team, you may create a single spreadsheet and use the same spreadsheet to track progress. To understand tracking, do the following:

1. Create a spreadsheet similar to the one adjacent.

	A	B	C	D
1	Donation Tracker			
2	Roll Number	Name	Donation Amount	Status
3	S001	Ashwin Kumar	100.00	Paid
4	S002	Babu Shankar	50.00	Due
5	S003	Charles	100.00	Due
6	S004			
7	S005			

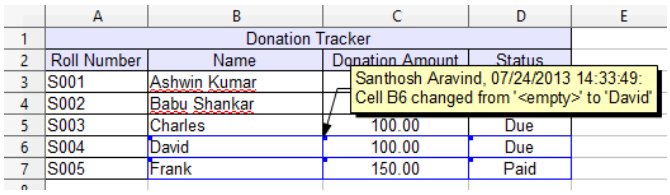
2. To enable tracking, Select **Edit > Changes > Record**.
3. You also need to protect this spreadsheet so that the editor or reviewer need not remember to turn on the revision marks. . Select **Edit > Changes >Protect Records…. Protect Records** dialog box appears.



4. Type a password in **Password** and **Confirm** textboxes. Click **OK**.
5. Save this spreadsheet.

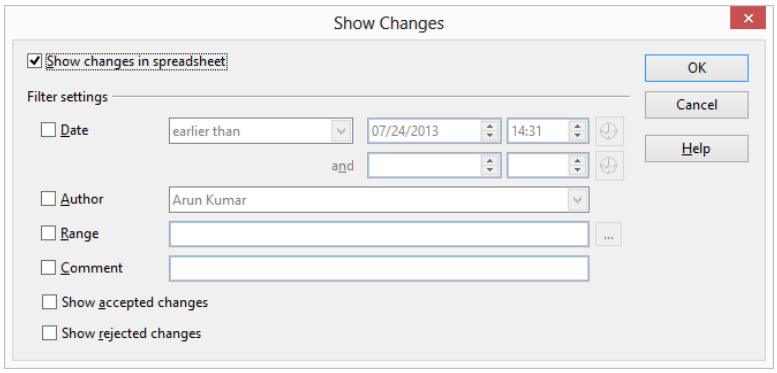
Now you may send this spreadsheet for others to populate data. Once you receive the spreadsheet, do the following:

1. Open the spreadsheet. Notice the changes are highlighted with a border; also comments are displayed when you move the mouse

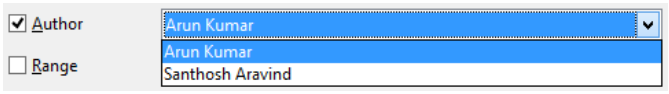


over highlighted cells.

2. You can also view changes by person, specific date or range of cells. For example to view changes made by a specific person, do the following:



   a. Select **Edit > Changes > Show…. Show Changes** dialog box appears as shown adjacent.



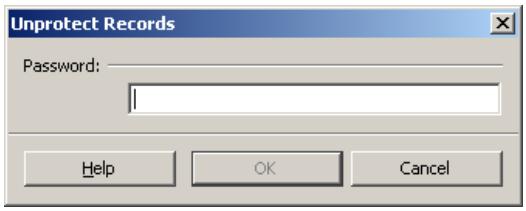
   b. Check **Author** and select the dropdown arrow.

   c. Select the name from this list and click **OK**. Observe the results displayed; notice the cells modified by the selected user is displayed.

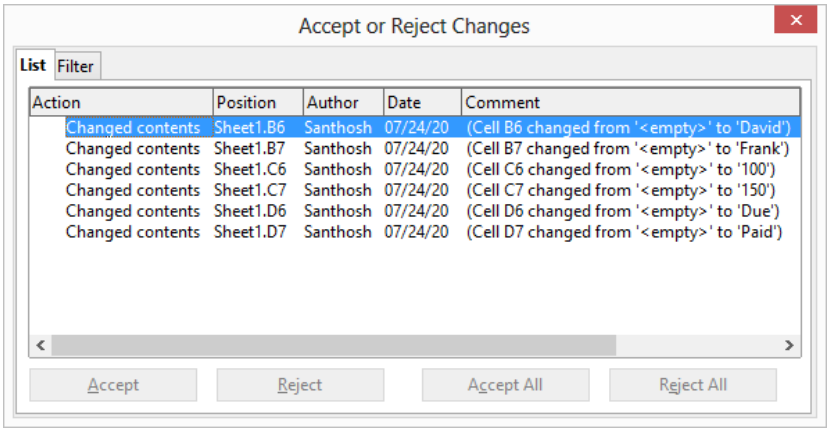
Accepting or Rejecting changes

You have learnt to enable tracking in the previous session. If you are the administrative owner of the workbook, you may choose to accept or reject changes made by other users who updated this workbook. To accept or reject, do the following:

1. Open the updated spreadsheet.
2. You need to unprotect the spreadsheet to accept or reject changes. To unprotect, select **Edit > Changes > Protect Records…. Unprotect Records** dialog box appears as shown adjacent.



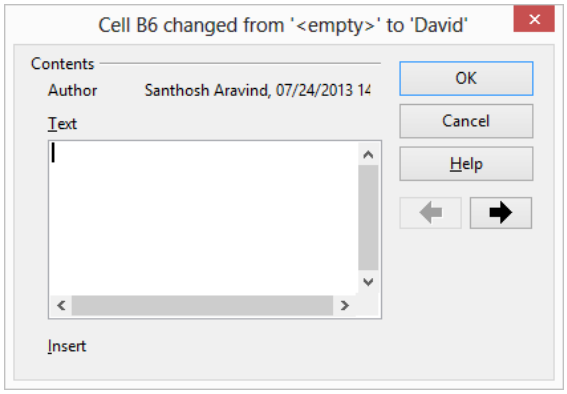
3. Enter the password provided earlier and click **OK**.
4. Select **Edit > Changes > Accept or Reject…. Accept or Reject Changes** dialog box appears (figure adjacent).



Now review each entry and click **Accept** (to accept the entry) or **Reject** (to reject the change) buttons.

You may include additional information through notes or comments when working with spreadsheets; this could be useful to reviewer to know more details when required.

To insert a comment, do the following:

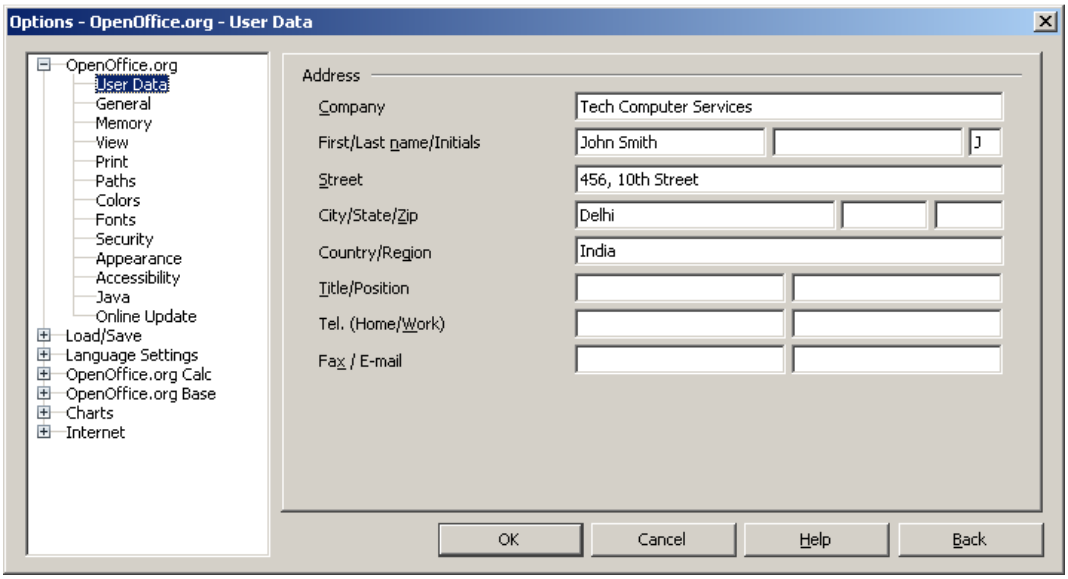


1. Place the cursor in a cell where you want to include a comment.
2. Select **Edit > Changes > Comments…**. A window appears similar to the one adjacent.
3. Type in the comment and click **OK**.

View or Modify names

You may have noticed different names in the popup and the author dropdown menus earlier. Spreadsheet software utilizes the names provided during installation by default and saves this information along with spreadsheets; however this can lead to confusion if a single name was used during installation. In such cases you can modify the user name by following the procedure below:

1. Select **Tools > Options**. **Options - OpenOffice.org - User Data** dialog box appears (figure below).

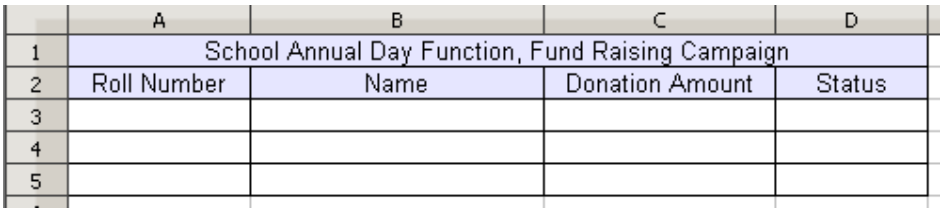


2. Notice the name of the user displayed in **First/Last name/Initials** text box (figure above). Type your name and click **OK**.

3. Repeat the procedure on all computers where you will open the spreadsheet from. Remember to keep unique names to avoid confusion.
4. Now open the shared spreadsheet, make changes and observe the changes.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a spreadsheet similar to the one below:  • Populate this sheet with roll number and name. • Enable tracking and protect this spreadsheet. Send this spreadsheet to your classmate and collect details of donation amount & status.
2.	Review each entry once you receive this spreadsheet; validate and accept only if it is correct.

ASSESSMENT

Answer the following

1. Explain the procedure to enable tracking in a spreadsheet.
2. Explain the procedure to include your name when creating spreadsheets.
3. Explain the procedure to review a spreadsheet and to accept or reject changes during a review.

Fill in the blanks

1. Show changes option is available under _____ submenu of _____ menu.
2. Accept or Reject option is available under _____ submenu of _____ menu.

SESSION 6: PROTECT FILES & ADD COMMENTS

Learning Objectives:
At the end of this session, you will be able to:

- Protect spreadsheets.
- Add comments to cells.

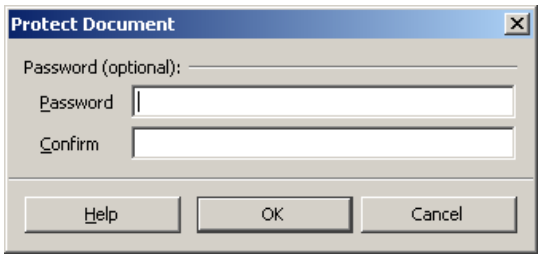
RELEVANT KNOWLEDGE

Spreadsheets may contain sensitive data that needs to be protected. It is recommended that you protect the spreadsheet from unauthorized users gaining access to it. You can also protect portions of a spreadsheet to avoid any accidental changes.

As you are aware, a workbook contains a minimum of three sheets by default. If you want to restrict users to add or more sheets, do the following:

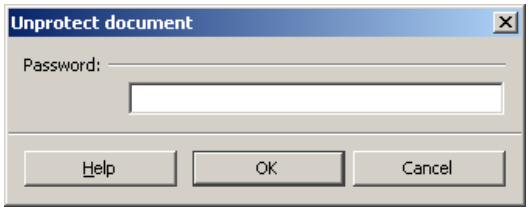
1. Open a new blank workbook.
2. Select **Tools** dropdown menu and select **Protect Document**.
3. Select **Document…**. A **Protect Document** dialog box appears.
4. Type a password in **Password** and **Confirm** textboxes. Click **OK**.
5. Now try inserting additional worksheets. Notice you are unable to insert or delete any worksheets!





To unprotect, do the following:

1. Select **Tools** > **Protect Document** > **Document…**.
2. An **Unprotect Document** dialog box appears.
3. Enter the password provided earlier and click **OK**. Now you can insert or delete worksheets.



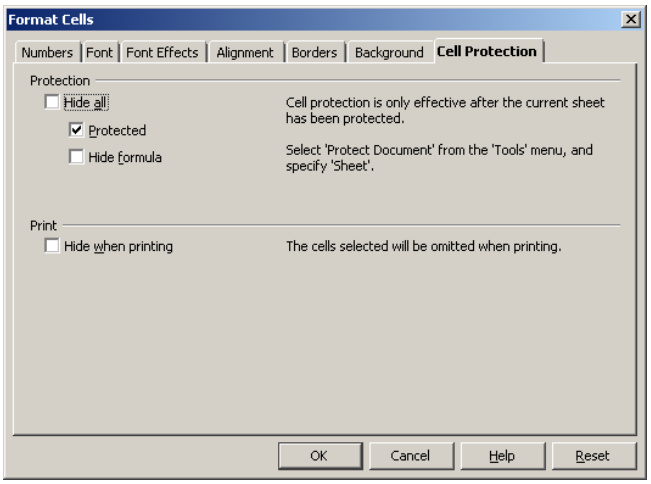
Protecting Cells

You can also protect specific cells of a worksheet. This is helpful when you want other to fill in information only in specific areas of the spreadsheet, without tampering the rest of the worksheet. For example, you can create a sales report sheet to be filled by team members but allow them to fill values only in certain cells of a worksheet.

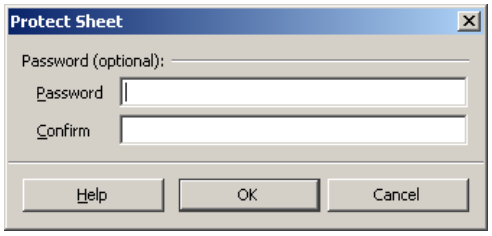
1. Open a new spreadsheet and create the adjacent structure.

	A	B	C
1	Product	Cost Per Unit	No. of Units Sold
2	Pen	$10.00	
3	Pencil	$5.00	
4	Eraser	$3.00	

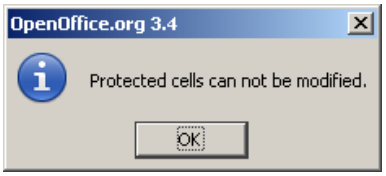
2. Right-click cell C2, click **Format > Cells….**A **Format Cells** dialog box appears. Select the **Cell Protection** tab.



3. Notice the default value set as **"Protected"**. Uncheck **Protected**, and click **OK**.
4. Repeat this procedure for cells **C3** and **C4**.
5. Now select **Tools** > **Protect Document** > **Sheet….** A **Protect Sheet** dialog box appears as shown below.



6. Type a password in **Password** and **Confirm** textboxes. Click **OK**.
7. Now try entering text in any other cell other than **C2, C3 & C4**. Notice that you are unable to enter any text as they are protected and a popup appears similar to the one below:



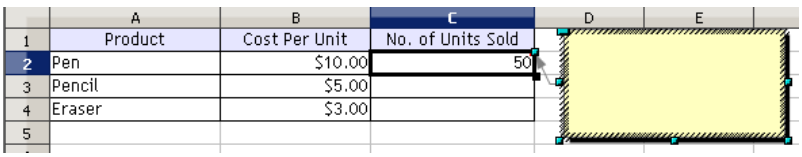
8. Click **OK**. Now enter values in cells **C2, C3 & C4**; notice that only these three cells are editable as they are unprotected.

Inserting Comments

You can also include comments to specific cells. This could be useful in situations when you want to include instructions for users when they fill values in a field. To insert a comment, do the following:

	A	B	C
1	Product	Cost Per Unit	No. of Units Sold
2	Pen	$10.00	
3	Pencil	$5.00	
4	Eraser	$3.00	

1. Place the cursor in the cell where you want to insert a comment, for example cell C2.
2. Select **Insert > Comment**.
3. Notice an empty yellow text box pointing to cell C2 is inserted.



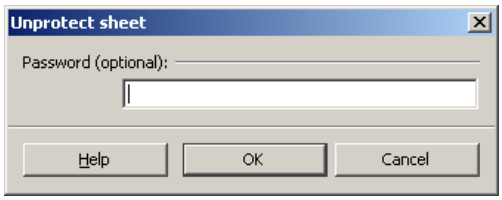
Note: To insert a comment, you may also use **CTRL+ALT+C** shortcut keys.

4. Type the comment within the yellow text box .

5. Comments are automatically saved and displayed when you move the mouse pointer over the cell that has comments (comments are indicated by a tiny red square).



Unprotect Cells



To unprotect, do the following:

1. Select **Tools** > **Protect Document** > **Sheet**….
2. An **Unprotect Sheet** dialog box appears.
3. Enter the password provided earlier and click **OK**. Now you can edit any cell they the sheet is left unprotected.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a workbook for compiling list of under graduate courses . a. Replace Course 1, 2 & 3 with respective course names. b. Include more courses as required. c. Protect the cells that do not require editing (ideally everything except fields for typing College name and courses). d. Send this workbook to your classmates through email. e. Assign the task to each of your classmate to fill the details; ask them to include information about the source of details through comments.

	A	B	C	D
1	College Name	Course 1	Course 2	Course 3
2				
3				
4				
5				

ASSESSMENT

Answer the following

1. Explain the procedure to password protect a document.
2. Explain the procedure to protect specific cells in a spreadsheet.

Fill in the blanks

1. To protect a workbook, you should use _____ option from _____ submenu of _____ menu.

SESSION 7: MERGE WORKBOOKS

Learning Objectives:
At the end of this session, you will be able to

- Merge workbooks.

RELEVANT KNOWLEDGE

You have learnt to merge documents using a word processor. Using the same concept, you can merge copies of shared workbooks into one final workbook. This is very useful when multiple users work on different copies of the same workbook and you need to consolidate all of them into a single workbook.

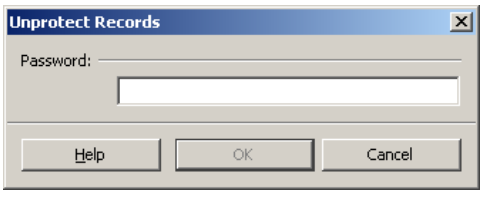
For example, you may have created a spreadsheet and sent it to two of your classmates for populating data; when you receive the copies, you can merge and review both the copies at the same time. To understand how to merge workbooks, do the following:

	A	B	C	D
1	Real Estate Brokerage Service			
2	Location	Rental Per Sq. Ft	Deposit	Maintenance
3				
4				
5				

1. Create a spreadsheet in **Sheet 1** similar to the one adjacent.
2. Create the same structure in **Sheet 2**.
3. You need to enable tracking as a pre-requisite for merging workbooks. So, select **Edit > Changes > Record** to enable tracking.
4. Also a spreadsheet needs to be protected prior to merging. Hence, select **Edit > Changes > Protect Record…**.
    a. A **Protect Records** dialog box appears.
    b. Type in a password in both **Password** and **Confirm** textboxes, click **OK**.
5. Save this spreadsheet (for example, **Real Estate.ods**).
6. Now create two copies of this spreadsheet (**File > Save As…**) and name them as
    a. **Real Estate Pricing -John.ods** (fill sheet 1)
    b. **Real Estate Pricing -Joe.ods** (fill sheet 2).

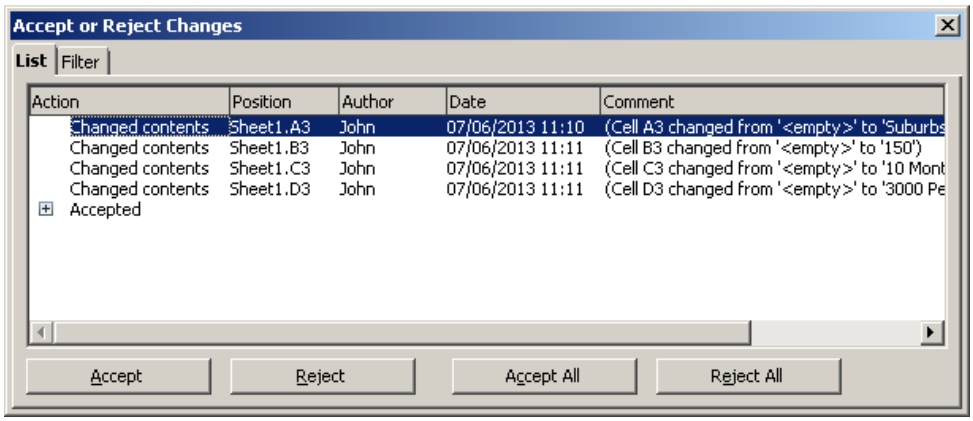
Now send this spreadsheet to two of your classmates and ask them to fill in the details.

Once you receive the spreadsheets, store them in a single folder for easier access and do the following:

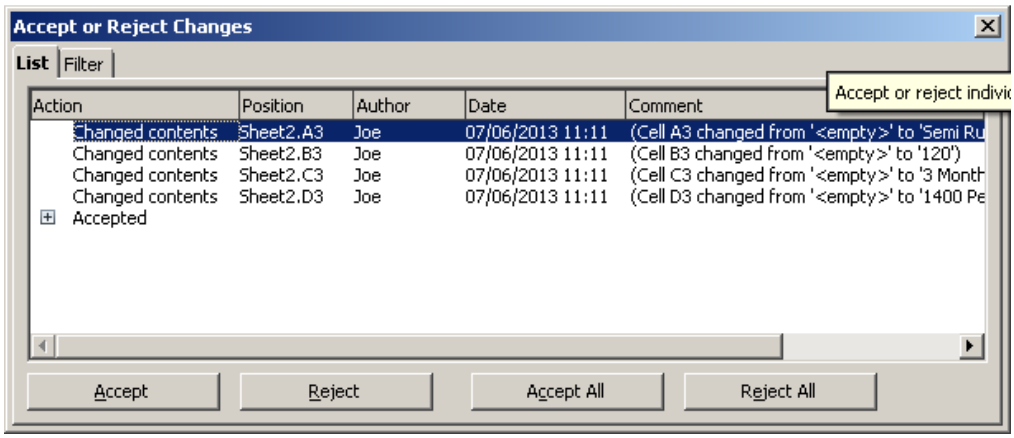


1. Open the main spreadsheet (**Real Estate.ods**).
2. Select **Edit > Changes >Protect Records…**. An **Unprotect Records** dialog box appears.

3. Type the password entered earlier and click **OK**.
4. Now to merge the first spreadsheet (sent from John, Real Estate Pricing - John.ods).
    a. Select **Edit > Changes > Merge Document**….An **Insert** dialog box appears.
    b. Browse and select the first spreadsheet (sent by John). Click **Insert**. Notice the contents from the first spreadsheet merged into this spreadsheet. Also notice the **Accept or Reject Changes** dialog box (figure below) appears for reviewing changes.



    c. Now review each change and click **Accept**.
    d. Close **Accept or Reject Changes** dialog box.
5. Now to merge the second spreadsheet (Send from Joe, Real Estate Pricing -Joe.ods).
    a. Select **Edit > Changes > Merge Document**…. **Insert** dialog box appears.
    b. Browse and select the second spreadsheet (Sent from Joe), click **Insert**. Notice the contents from the second spreadsheet merged into this spreadsheet; also notice the **Accept or Reject Changes** dialog box (figure below) appears for reviewing changes.



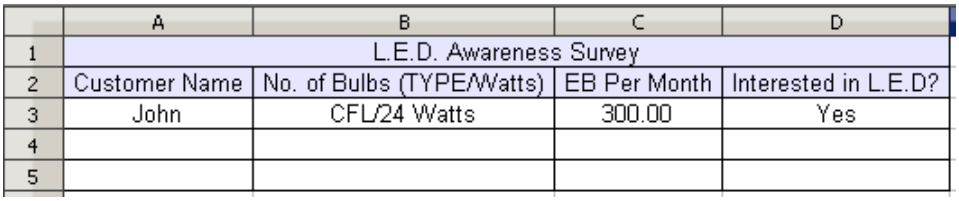
    c. Now review each change and click **Accept**.

d. Close **Accept or Reject Changes** dialog box.

In this example, you used two different worksheets in a workbook for better understanding. However, take extra caution when merging multiple worksheets; particularly, observe changes that happen during merging to avoid any confusion. Practice until you get a thorough understanding of this feature.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a spreadsheet similar to the one below:  a. Create the same structure in sheet 2 and sheet 3. b. Rename the sheets to identify the location of the survey. c. Enable tracking and protect the workbook. Provide copies of this sheet to couple of your classmates; ask them to create at least 20 entries.
2.	Collect the spreadsheets from your classmates. Merge the spreadsheets based on the guidelines provided in this session.

ASSESSMENT

Answer the following

1. Explain the procedure to merge workbooks.

Fill in the blanks

1. To merge spreadsheets, you should select _____ option from _____ submenu from _____ menu.

SESSION 8: ADMINISTER DIGITAL SIGNATURES

Learning Objectives:
At the end of this session, you will be able to

- Use digital signatures.

RELEVANT KNOWLEDGE

You can use digital signatures to assure authenticity of a spreadsheet. Digitally signing a document assures recipients that it was created by a known sender and not altered during transit. For example, manufacturing companies on sending out product and pricing details to distributors or dealers digitally sign the spreadsheet to assure authenticity.

Digital certificate is an electronic document by itself that is used for encrypting other documents such as spreadsheets, audio or video files, etc. Digital certificates are acquired from a trusted third party digital certificate provider or internal IT department of an organization.

Additional Information: http://en.wikipedia.org/wiki/Digital_signature.

Note: You need to sign-up and install a digital certificate before you proceed; you may acquire a personal digital certificate (for free) from the following websites:

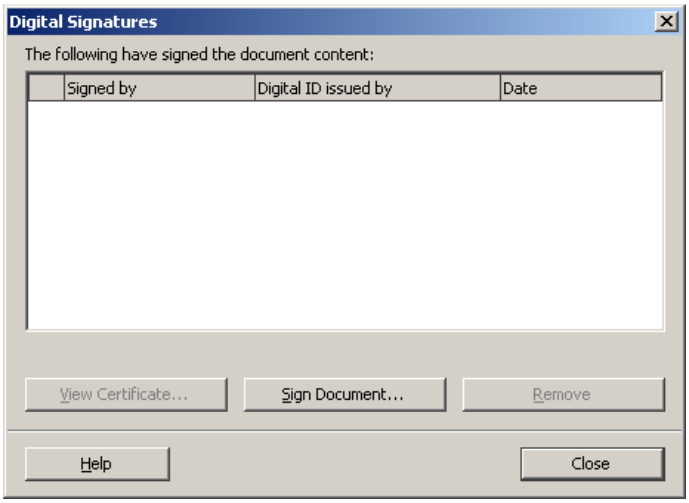
- www.comodo.com
- www.startssl.com
- www.cacert.org

Refer to the websites for detailed instructions on instructions and terms & conditions; Use Google to find out more websites that may offer digital certificates for free.

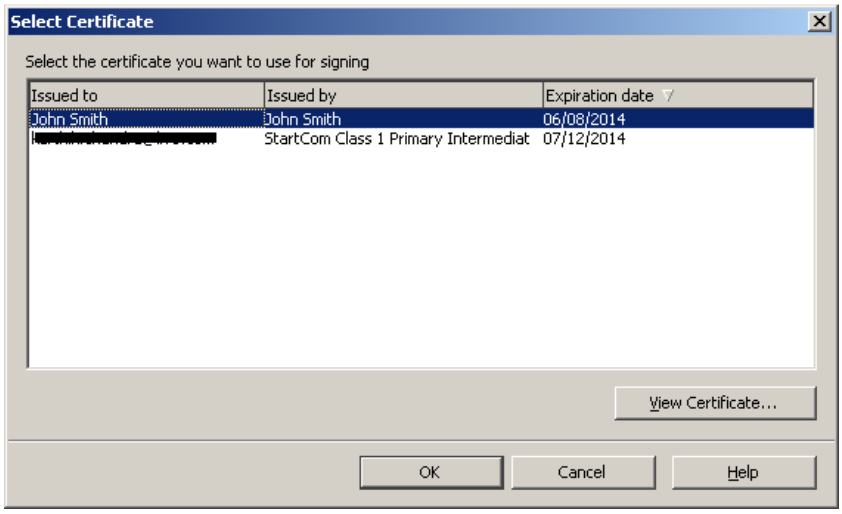
Once you have the certificate installed, do the following:

	A	B	C	D
1	Product Update & Price List			
2	Product Name	Unit Price	Target in Units	Commission (Total)
3	Spiral CFL 65W	750.00	150	15000.00
4	Spiral CFL 45W	550.00	120	15600.00
5	Spiral CFL 80W	900.00	120	18000.00

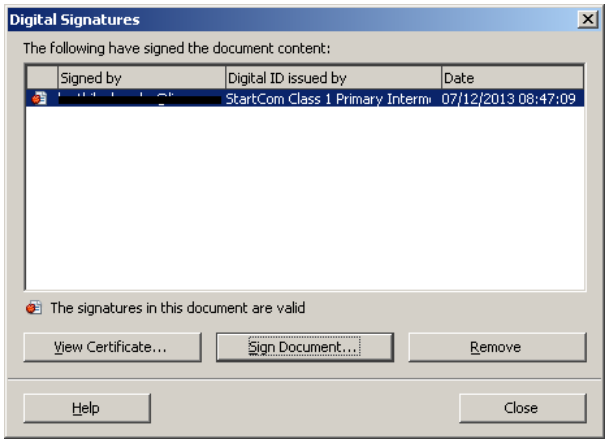
1. Create a spreadsheet similar to the one adjacent.
2. Select **File > Digital Signatures…**. A **Digital Signatures** dialog box appears as shown below.



3. Click **Sign Document…**. A **Select Certificate** dialog box appears (figure below).

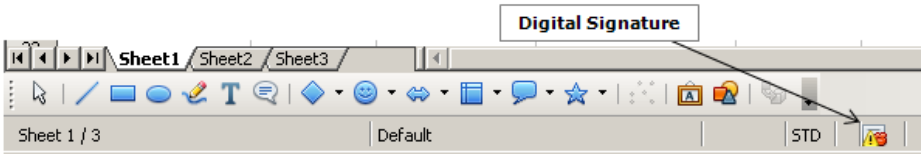


Note: If you have more than one digital certificate, then you will find a list of certificate to choose from. Select the one that is most appropriate.



4. Select the certificate from this list, click **OK**. Notice the results displayed (figure adjacent).
5. Click **Close**. Notice the digital signature icon at the bottom of the spreadsheet software (figure below) indicating that the spreadsheet is digitally signed. Same signature details will be visible

when recipients view the spreadsheet and recipients can be assured that this document is not tampered and it is authentic as it is digitally signed.



Digital Signature Icons

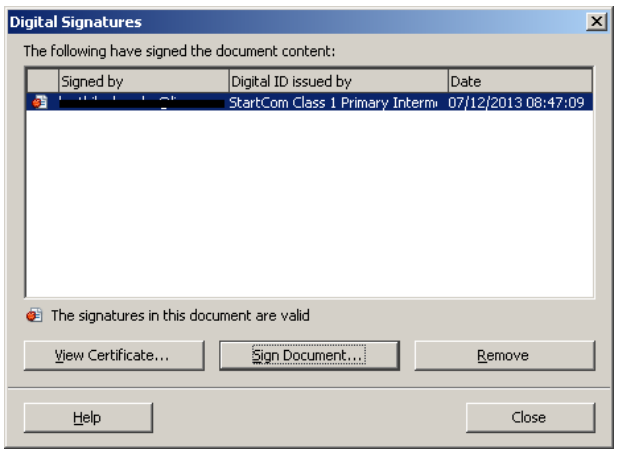
You may have noticed the digital signature icon displayed at the bottom of the spreadsheet software ( ); Spreadsheet software includes the following icons to describe the state of the digital signature:

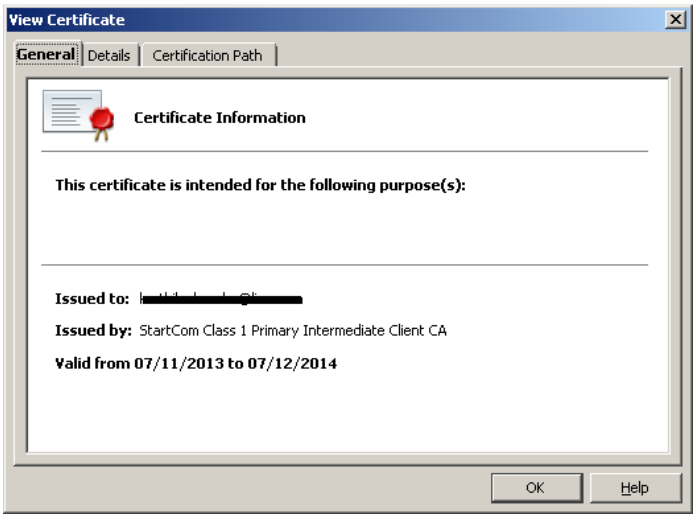
a. **Stylised red seal** indicates document is OK and not altered since the time it was signed.
b. **Stylised red seal along with small yellow triangle** indicates that the certificate is not validates; however the document is OK and not altered since the time it was signed.
c. **Yellow triangle** indicates the digital signature is invalid.
d. **Yellow triangle with black exclamation** indicates the document signature is broken; meaning the document is tampered and should not be trusted anymore.

View Digital Certificate

To view the digital certificate, do the following:

1. Open the spreadsheet that is digitally signed.
2. Select **File > Digital Signatures….Digital Signatures** dialog box appears (figure adjacent).
3. Click **View Certificate…. View Certificate** dialog box appears (figure below).
4. Notice the certificate details in **General, Details** and **Certification Path** tabs.





Important: Once a spreadsheet is digitally signed no alternation must be made as it is considered a final copy. If you alter the spreadsheet, you need to digitally sign the spreadsheet again. It is always recommended that you digitally sign only after the spreadsheet is finalized.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Apply digital signature to the workbooks created in the previous sessions.

ASSESSMENT

Answer the following

1. Explain the concept of digital signature.
2. Explain the procedure to digitally sign a document.

Fill in the blanks

1. _____ signing a document assures recipients that it was created by a known sender and not altered during transit when transferred electronically.
2. _____ is an electronic document by itself that is used for encrypting other documents such as spreadsheets, audio or video files, etc.
3. To digitally sign a spreadsheet, you should select _____ option from _____ menu.

SESSION 9: RESTRICT ACCESS

Learning Objectives:
At the end of this session, you will be able to:

- Restrict access to a spreadsheet.

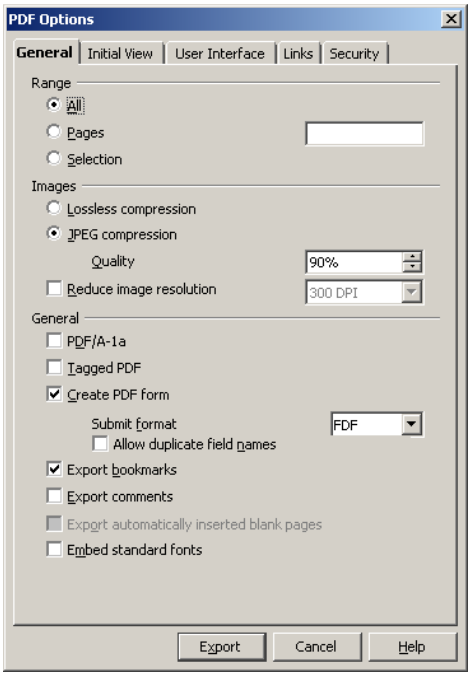
RELEVANT KNOWLEDGE

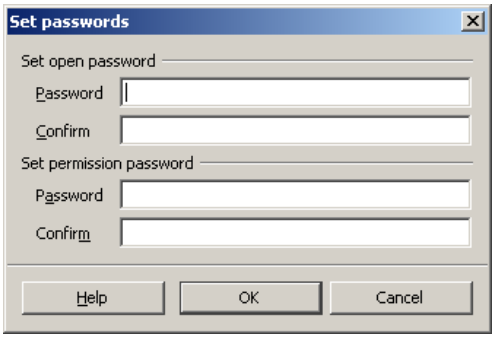
Imagine you have spent hours to create a sensitive spreadsheet and when that is sent to a group, someone prints or copies and circulates details without your consent. To avoid this, you can use a spreadsheet feature to protect the spreadsheet. However, you need to save the spreadsheet by converting to a PDF document.

1. Create a new spreadsheet similar to the one below:

	A	B	C	D
1	L.E.D. Power Saving Products			
2	Product	Unit Price	MRP	Profit
3	Eveready HL 104 LED Portable Lights	₹.145.00	₹.175.00	₹.30.00
4	Eureka Forbes E200 LED Solar Lights	₹.450.00	₹.599.00	₹.149.00
5	Moserbaer Solar LED Lantern	₹.2,900.00	₹.3,590.00	₹.690.00

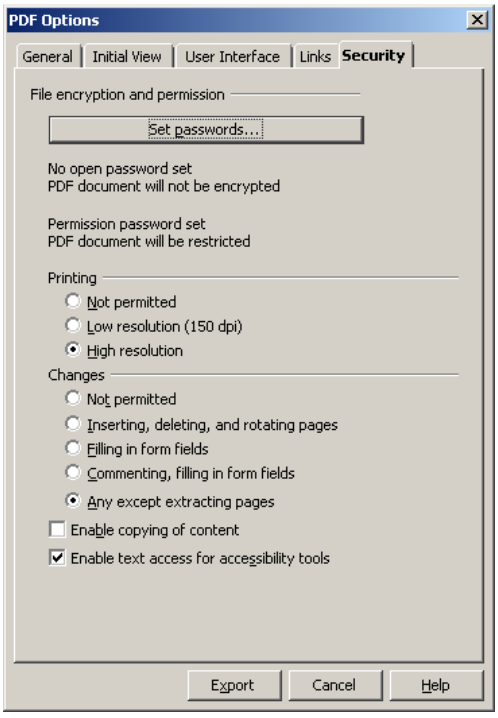
2. Select **File > Export as PDF…**. A **PDF Options** dialog box appears (figure below - left).

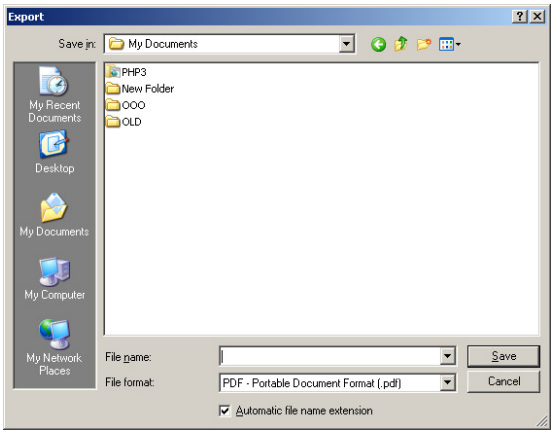




3. Select **Security** tab.

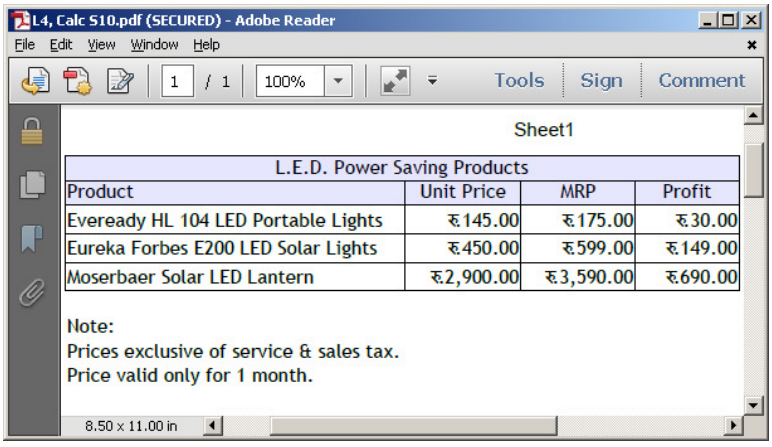
4. Click **Set passwords…** button. **Set passwords** dialog box appears as above – right.
5. To set permissions, you need to provide a password first. Type in a password in **Password** and **Confirm** textboxes under **Set permission password** section. Click **OK**.





   a. If you do not want this PDF to be printed by others (including you), select **Not Permitted** under **Printing** section.
   b. If you do not want this PDF content to be copied by others (including you), Uncheck **Enable copying of content** under **Changes** section.
6. Click **Export**. An **Export** dialog box appears as shown above (right).
7. Type a name for this PDF file in **File Name:** and click **Save**.

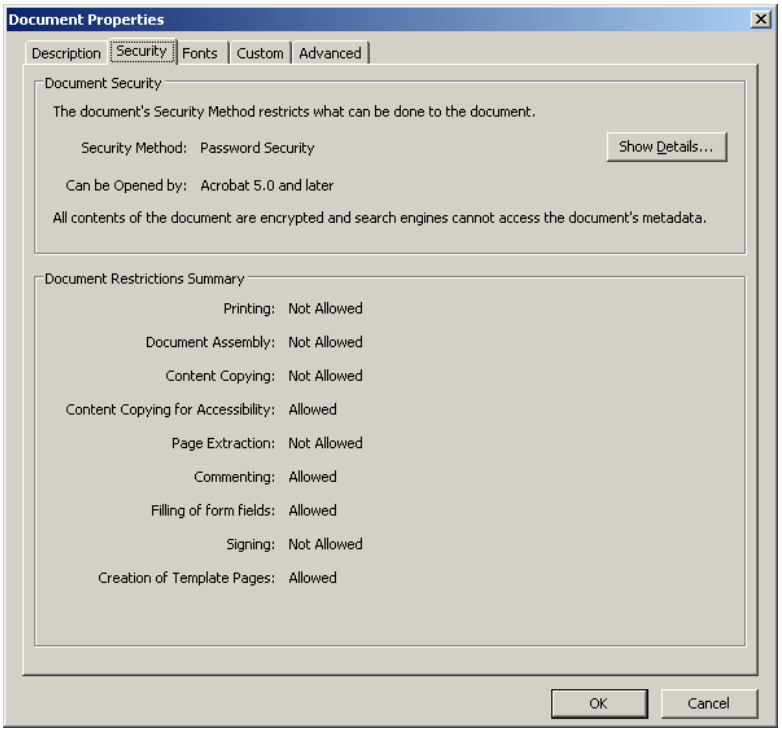
Now open this PDF file using Adobe Acrobat Reader; notice the copying (CTRL+C) and printing (File > Print) functions are disabled thus protecting this document being printed or copied.

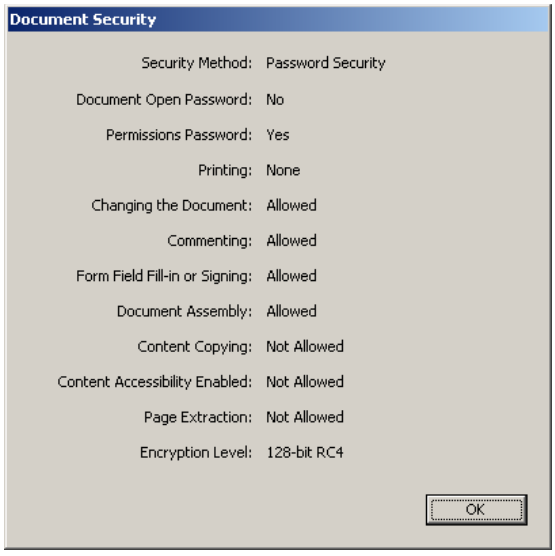


1. Open this file in **Adobe Acrobat Reader**. Notice the title bar with file name and encryption status as **"Secured"** (figure

adjacent).

2. Select **File > Properties**. **Document Properties** dialog box appears; select **Security** tab (figure adjacent).
3. Notice the values under **Printing:** and **Content Copying:**.
4. Also exported PDF files are encrypted; to view details about encryption, click **Show Details…. Document Security** dialog box appears as shown below. Notice the value under **Encryption Level:**.





Using IRM (Information Rights Management), Microsoft Excel 2007

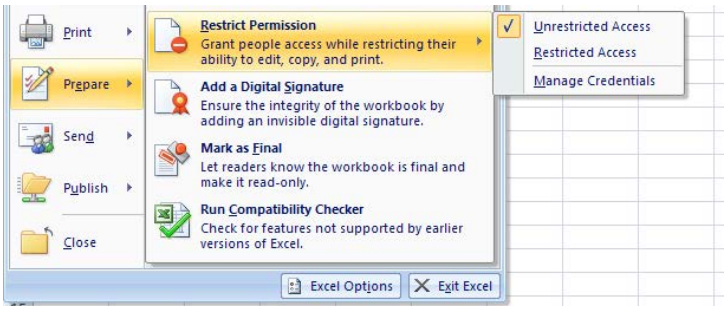
When you send spreadsheets to recipients, it may be accidentally printed, copied or forwarded to unauthorized people. Imagine if you have sent a confidential spreadsheet through email that should be viewed only by the head of finance department; this document may be viewed by others as you have no control!

To avoid such a mishap, you can restrict access by making use of Information Rights Management (IRM) which gives you the following advantages:

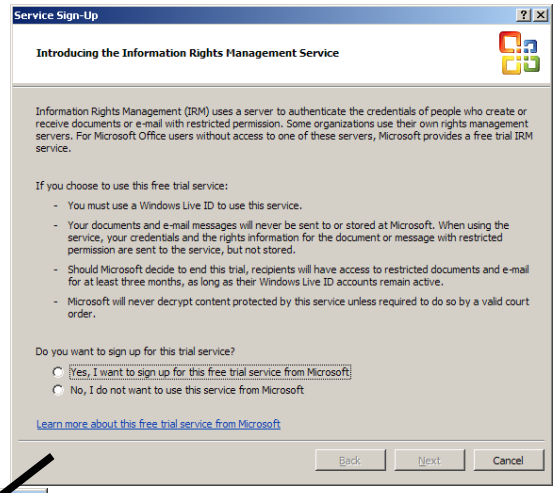
- Restrict spreadsheet being copied, printed or forwarded
- Set expiration so that it cannot be viewed after a specific duration
- Restrict users from using Print Screen feature to capture the screen!

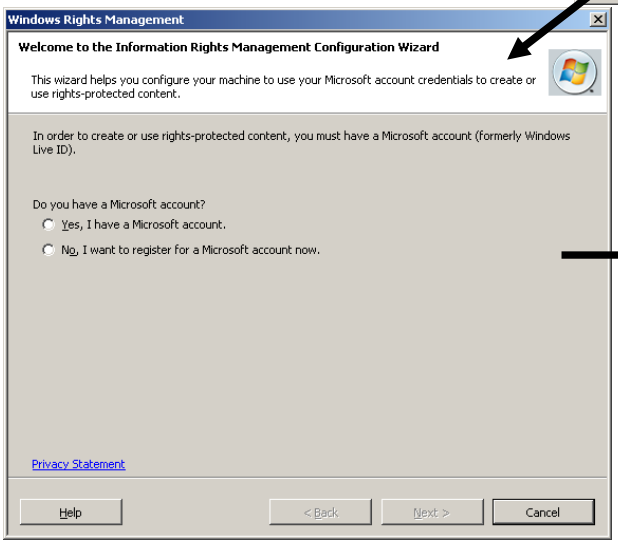
Note: You need to have an active internet connection and a Microsoft Account for this exercise.

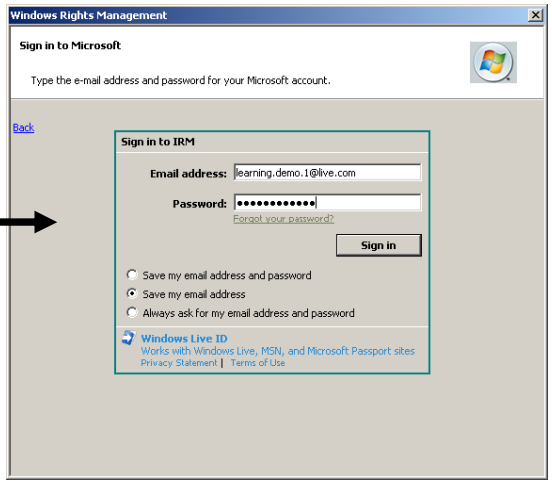
To understand restricting document access using IRM, do the following:



1. Open an existing spreadsheet.
2. Select **File > Prepare.**
3. Select **Restricted Access**. A **Service Sign-Up** popup appears (figure adjacent).
4. To use this service, you need to have a Microsoft Account (Live, Hotmail or Outlook.com). To signup, select **Yes, I want to sign up for this free trial service from Microsoft**. Click **Next**. You will see a window similar to the one below.

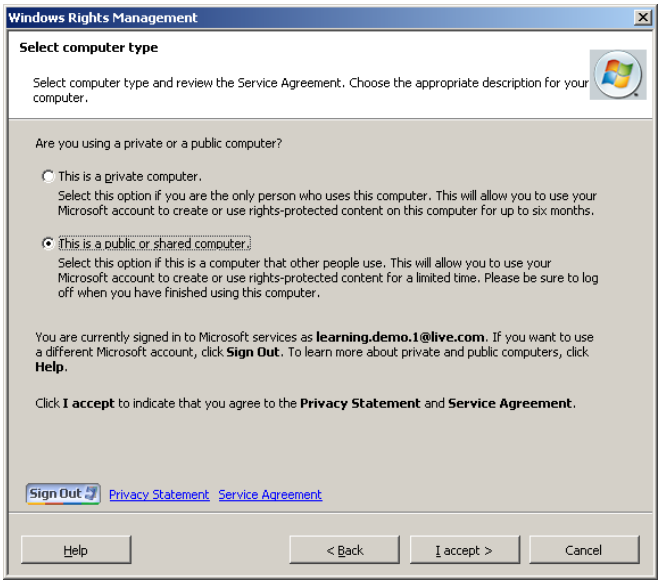


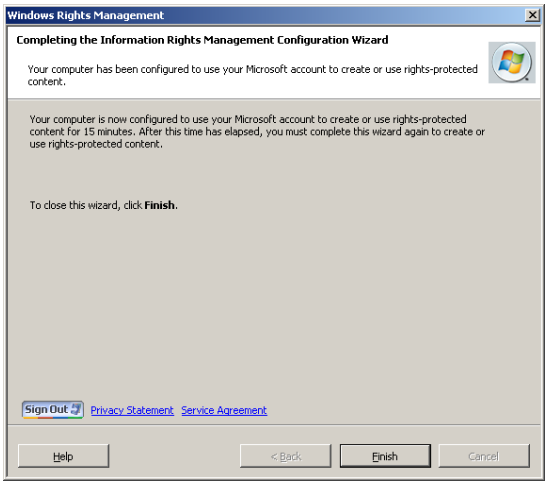




1. Select **Yes, I have a Microsoft account**. Click **Next**.

2. Enter the email address and password, Click **Sign In**. You will see a window similar to the one adjacent.
    a. If you are using your own computer, select **This is a private computer**.
    b. If you are using a shared computer (browsing centre, computer lab, etc.), select **This is a public or shared computer**.
    c. Click **I Accept**.



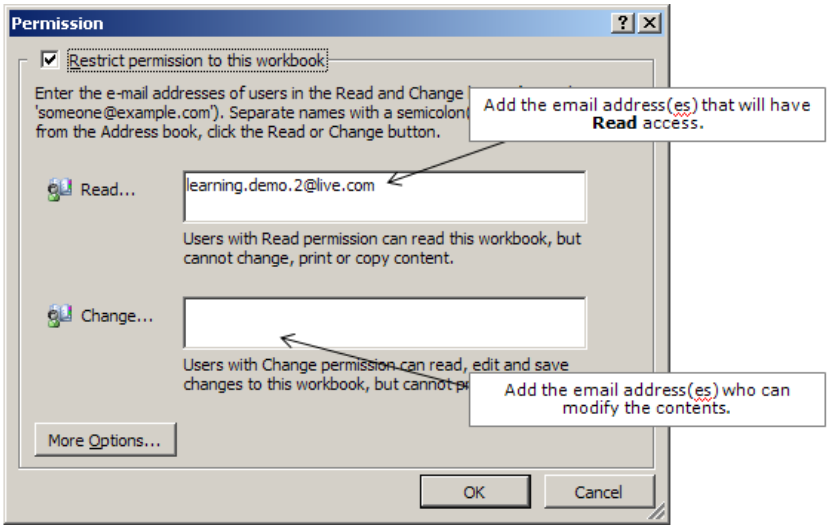


Note that this process will take some time. You may notice security certificate dialog box, click **Yes** if you receive such notifications.

3. Click **Finish**

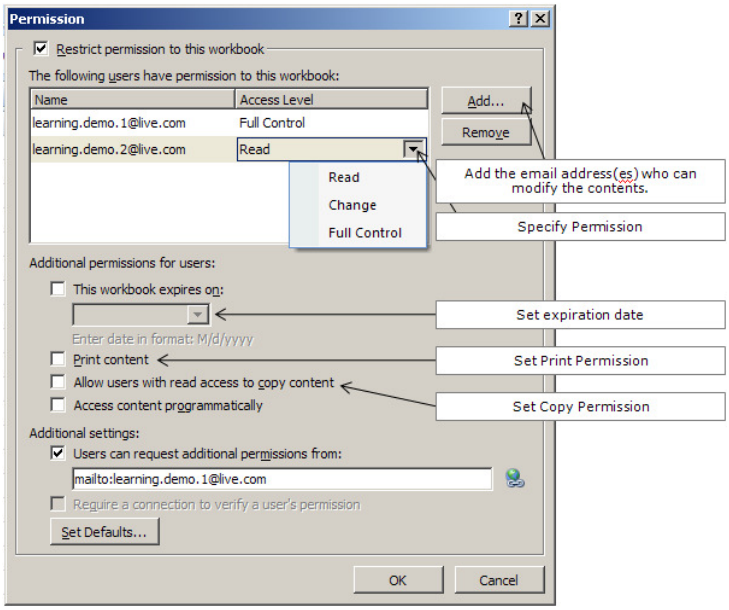
Now you can configure permissions by following the procedure below:

1. Ensure **Restrict Permissions to this workbook** is checked (figure below).



2. Click **More Options**….A **Permission** dialog box appears (figure below).

Permissions:



a. **Read:** Users can only read but cannot copy, print or edit.
b. **Change:** Users can read, edit and save changes but cannot print.
c. **Full Control:** Users can do anything with the spreadsheet.

3. Click **OK**.
4. Now you can send this spreadsheet to intended recipients.

Note:

- Anyone who attempts to open this file must have a Microsoft Account and use the correct email address as specified for permissions.
- Permissions will automatically apply when they attempt to open the file.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Apply content and printing protection to the spreadsheets created in the previous sessions (Save as PDF) using OpenOffice.org Calc.
2.	Restrict a document by making use of IRM using Microsoft Excel.

ASSESSMENT

Answer the following

1. Explain the procedure to protect a spreadsheet from being copied when exporting as a PDF document.
2. Explain the procedure to protect a spreadsheet from being printed when exporting as a PDF document.

Fill in the blanks

1. To allow others not to print, you should select _____ under Printing section in PDF Options dialog box.
2. To allow others to print but not copy the content, you should _____ Enable copying of content under Changes section in PDF Options dialog box.
3. Acronym for IRM: _____.
4. _____ can protect documents from being accidentally printed, copied or forwarded to unauthorized people.

SESSION 10: SHARE A WORKBOOK

Learning Objectives:

At the end of this session, you will be able to:

- Share a workbook.

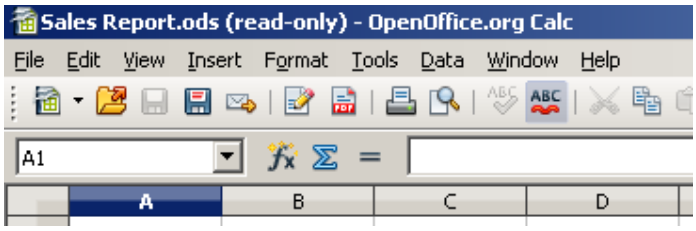
RELEVANT KNOWLEDGE

When you work with spreadsheets only one person can edit at a time by default; all other users will be able to open only a read-only copy of the spreadsheet.

You can share a workbook in spreadsheet software. This could be useful in situations when you need to have multiple users working a single workbook. For example if you have a workbook for updating customer records by multiple users, you can share the workbook allowing others to have read-write access.

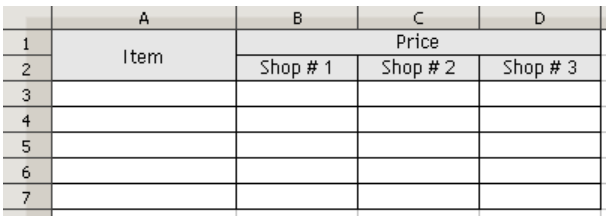
First step is to provide access to other users on a network. You should save the workbook in a folder that is accessible by other users on a network. To share the folder that has the spreadsheet, do the following:

1. Right-click the **Folder**, select **Properties**.
2. Select **Sharing** tab, provide **Full Control** to **Everyone** group.
3. Access this shared folder and confirm if you are able to access this folder over the network.
4. Create a spreadsheet and save that in this shared folder.
5. Keep this spreadsheet open on your computer and try accessing this spreadsheet from other computers on this network. This spreadsheet is opened in Read-only mode on other computers (Notice the message at the top above menu bar):



6. Now close the spreadsheet on other computers.

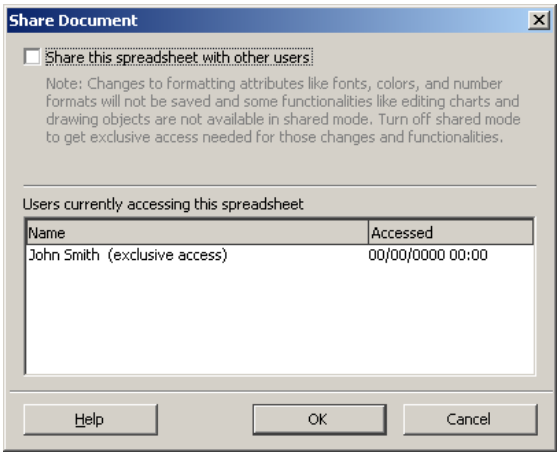
To share a workbook, do the following:

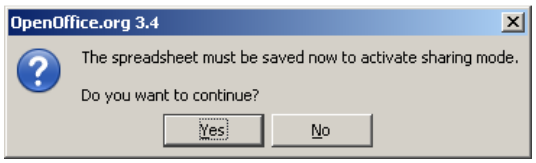


	A	B	C	D
1	Item	Price		
2		Shop # 1	Shop # 2	Shop # 3
3				
4				
5				
6				
7				

1. Open a new spreadsheet and create the adjacent structure.
2. Save this spreadsheet in the shared folder with a file name, for example **Latest Price.ods**.

3. Select **Tools > Share Document…**. **Share Document** dialog box appears as shown adjacent.
4. Check **Share this spreadsheet with other users** and click **OK**. A popup appears similar to the one below:





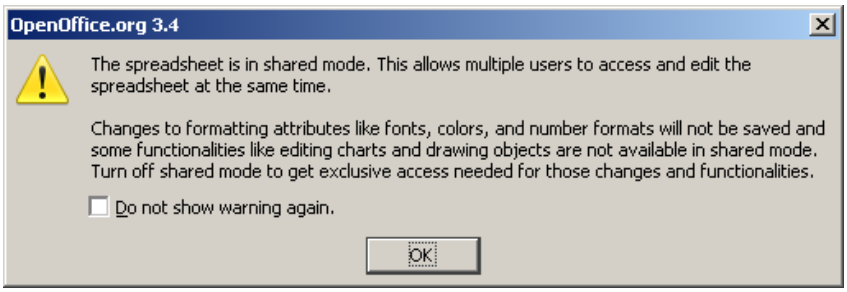
5. Click **Yes**. Now this spreadsheet is shared (figure adjacent).
6. Go ahead and populate **A3 to A7** with list of items and their price in **B3 to B7**.



7. Save the spreadsheet; close this spreadsheet open on your computer.

Accessing shared spreadsheet

1. Open this spreadsheet from another computer. A popup appears similar to the one adjacent.

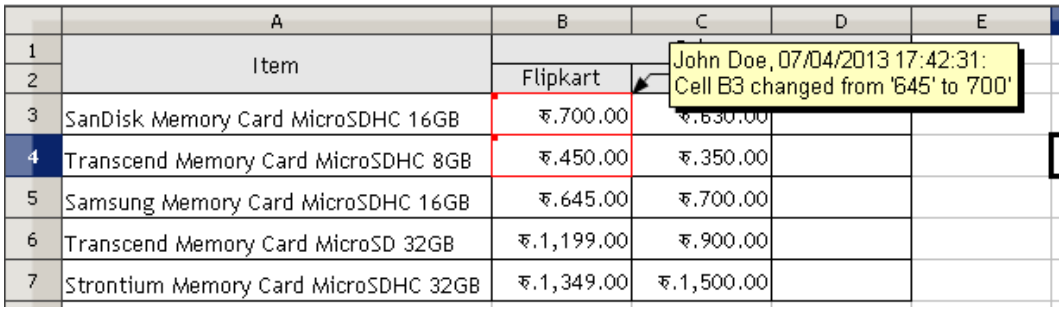


2. Click **OK**.
3. Go ahead and update **C3 to C7**.
4. Save the spreadsheet.

Now open the spreadsheet on your computer; notice the updated entries (Sample below).

	A	B	C	D
1	Item	Price		
2		Shop # 1	Shop # 2	Shop # 3
3	SanDisk Memory Card MicroSDHC 16GB	₹.645.00	₹.630.00	
4	Transcend Memory Card MicroSDHC 8GB	₹.330.00	₹.350.00	
5	Samsung Memory Card MicroSDHC 16GB	₹.645.00	₹.700.00	
6	Transcend Memory Card MicroSD 32GB	₹.1,199.00	₹.900.00	
7	Strontium Memory Card MicroSDHC 32GB	₹.1,349.00	₹.1,500.00	

If there are conflicts, you may see a red border around the cells (move your mouse over to view changes) as shown below.



	A	B	C	D	E
1	Item				
2		Flipkart			
3	SanDisk Memory Card MicroSDHC 16GB	₹.700.00	₹.630.00		
4	Transcend Memory Card MicroSDHC 8GB	₹.450.00	₹.350.00		
5	Samsung Memory Card MicroSDHC 16GB	₹.645.00	₹.700.00		
6	Transcend Memory Card MicroSD 32GB	₹.1,199.00	₹.900.00		
7	Strontium Memory Card MicroSDHC 32GB	₹.1,349.00	₹.1,500.00		

Important note:

Following list of items is disabled in a shared spreadsheet (not limited to):

- **Edit > Compare Document**
- **Insert > Names**
- **Insert > Object**
- **Insert > Comment**
- **Format > Print Ranges, etc.**

For complete list of disabled items, refer to the following URL:

http://wiki.openoffice.org/wiki/Documentation/OOo3_User_Guides/Calc_Guide/Sharing_documents_among_reviewers

It is highly recommended that you share only after finalizing the structure of the workbook.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a spreadsheet similar to the one in this session (figure below).

	A	B	C	D
1	Item	Price		
2		Shop # 1	Shop # 2	Shop # 3
3				
4				
5				
6				
7				

a. Populate with list of computer accessories under Items.
b. Share this workbook and assign the task of collecting pricing details from your classmate (one shop per classmate).
c. Consolidate the data from your classmates and share with rest of the class.

ASSESSMENT

Answer the following

1. Explain the procedure to share a workbook.

Fill in the blanks

1. You need to _____ a workbook if you want multiple users to edit at the same time.
2. Share Document option is available in _____ dropdown menu.

PRESENTATION SOFTWARE

SESSION 1: INSERTING AND MODIFYING SMARTART GRAPHICS

Learning Objectives:

In previous sessions, you learnt to create presentations, include tables, charts, audio and video clippings. You also learnt to animate objects, review content, print a presentation, design presentation templates, create handouts and notes, etc. In this module, you will learn to work with SmartArt graphics, customize animation & slide shows, annotate presentations and create presenter-independent slide shows.

At the end of this session, you will be able to:

- Use SmartArt graphics in presentation software.

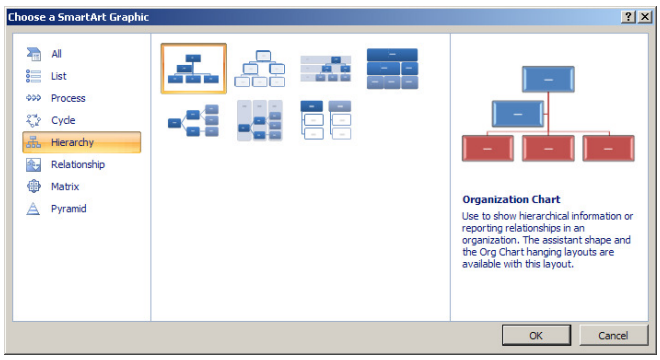
RELEVANT KNOWLEDGE

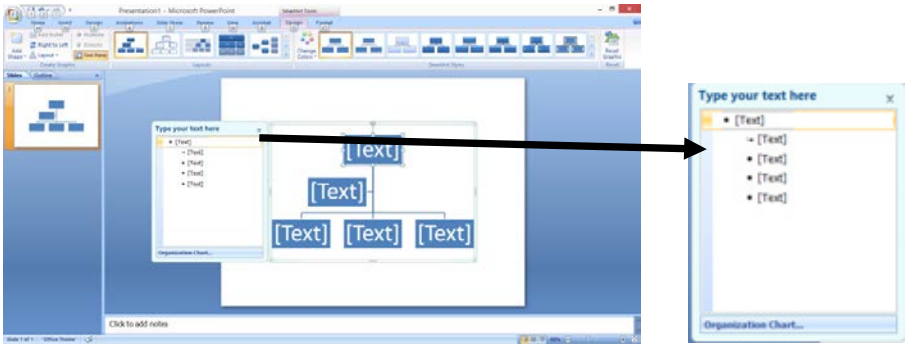
You have already learnt about SmartArt graphics and have learnt to use it in Word processing & Spreadsheet software. In this session you will learnt to use SmartArt graphics in presentation software. As you know, SmartArt graphics is a feature of Microsoft PowerPoint that has pre-defined styles for use in presentations.

You can create diagrams using SmartArt graphics. For example, when you create a presentation for presenting a company's profile, you can use SmartArt graphics to include an organizational chart representing a company's structure.

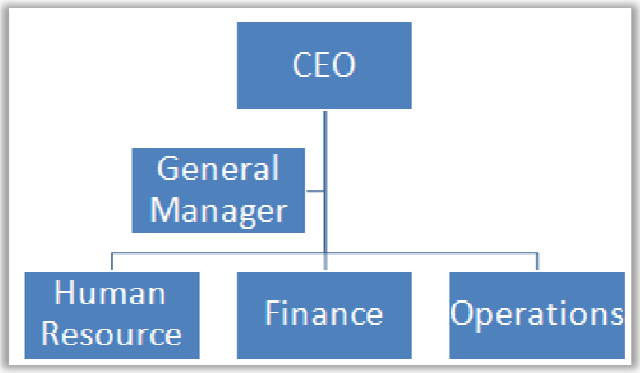
To create an organizational chart representing a company's structure, open a new blank presentation and do the following:

1. Select **Insert** tab and click **SmartArt** from the **Illustrations** group.
2. A **Choose a SmartArt Graphic** dialog box appears as shown adjacent.
3. Select **Hierarchy**, and select **Organization Chart** (middle pane). Click **OK**. Notice the **Organizational chart** inserted in the presentation (figure below).





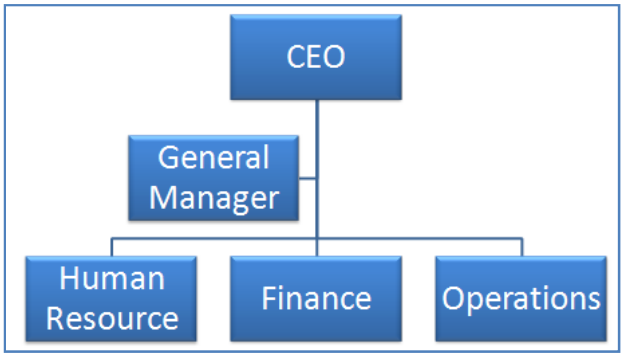
4. Now you need to add text to illustrate the organizational structure. To modify the default text, enter the following under *Type your text here* section:
    a. First Level: CEO
    b. Second Level: General Manager
    c. Third Level: Human Resources, Finance, Operations
5. The organizational structure (illustrated adjacent), is now displayed as a hierarchy which is easier to understand.



Modify a SmartArt

You can use the ***Design*** tab to enhance the visual appearance of the SmartArt. Here you can customize the color, style and layouts of a SmartArt. To apply a style, do the following:

1. Select ***Design*** tab.
2. Select ***White Outline*** available in ***SmartArt Styles*** group and apply. Notice the visual effect changed (figure adjacent).



Use the list given below to select the appropriate illustration for a workflow process:

- Use **List**, to illustrate a list that does not follow a step-by-step process.
- Use **Process**, to illustrate a one way process.
- Use **Cycle**, to illustrate a continuous process.
- Use **Hierarchy**, to illustrate tree structure such as an organizational chart.
- Use **Relationship**, to illustrate connections between sets.

- Use **Matrix**, to illustrate how parts relate to a whole.
- Use **Pyramid**, to illustrate a top to bottom proportional relationship.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create presentation on the following titles: a. Rain Water harvesting b. Water Treatment process for drinking water c. Solar Energy Process Use appropriate SmartArt Graphics for illustrating the step-by-step process.

ASSESSMENT

Answer the following

1. Explain the purpose of SmartArt graphics in Presentation Software.

Fill in the blanks

1. SmartArt option is available in _____ group of _____ tab.

SESSION 2: ADD MULTIMEDIA ELEMENTS

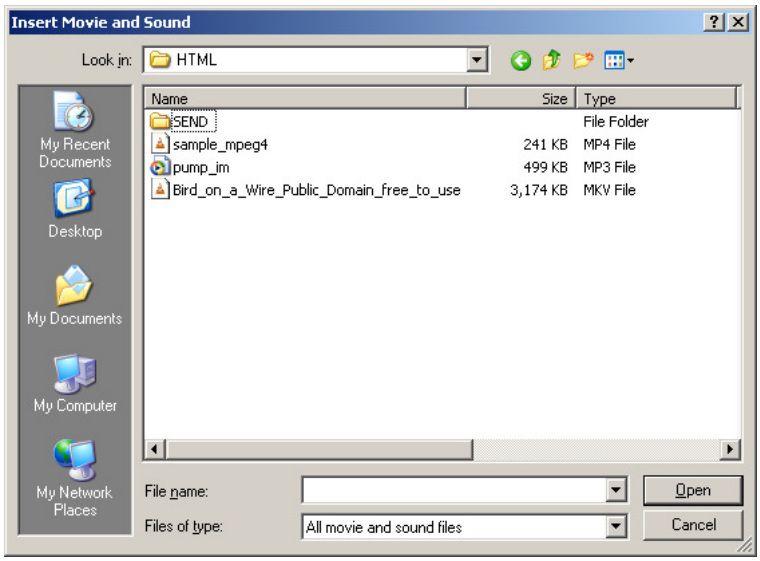
Learning Objectives:
At the end of this session, you will be able to

- Use multimedia elements in a presentation.

RELEVANT KNOWLEDGE

You have already learnt to use clip arts and shapes in previous sessions. In this session you will learn to use audio & video elements in a presentation. You can enhance a presentation by audio & video content. Presentation software contains built-in movie clips that you can use in a presentation. To use a built-in movie clip, do the following:

1. Open a new blank presentation.
2. Select **Insert > Movie and Sound**. An **Insert Movie and Sound** dialog box appears (figure adjacent).
3. Browse and select the clip you want to use and click **Open**. Notice the clip inserted into the presentation.





4. Notice the Media Playback controls available above the drawing toolbox (figure below). You may use this to play or check the movie clip that you inserted earlier.

5. Play the presentation to view the clip (Press F5). Notice the movie clip played automatically.



Tip: You can add music or voice tracks to presentations. You can use this feature to narrate a presentation or play a mild music during presentation. Similarly, you can add audio clips either from Clipart or from your own collection. Go ahead and try inserting different audio clips and observe the results.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Download relevant movie clips for topic selected in the previous session from youtube.com (use clips in public domain) and include them in the presentation.

ASSESSMENT

Answer the following

1. Explain the procedure to include multimedia elements in a presentation.

Fill in the blanks

1. You should select _____ option from Insert dropdown menu.

SESSION 3: CUSTOMIZE SLIDE COMPONENT ANIMATIONS

Learning Objectives:
At the end of this session, you will be able to :

- Customize slide components using animations.

RELEVANT KNOWLEDGE

You can animate the text and objects in a presentation to make your presentation more interesting. You could also use this feature to emphasise a particular text, paragraph or an object by attracting the attention of the audience.

To use animations in a presentation, do the following:

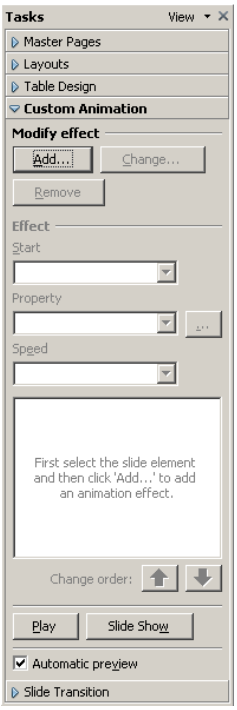
1. Create a new presentation. Include text, shapes, etc. when creating content (refer adjacent figure).

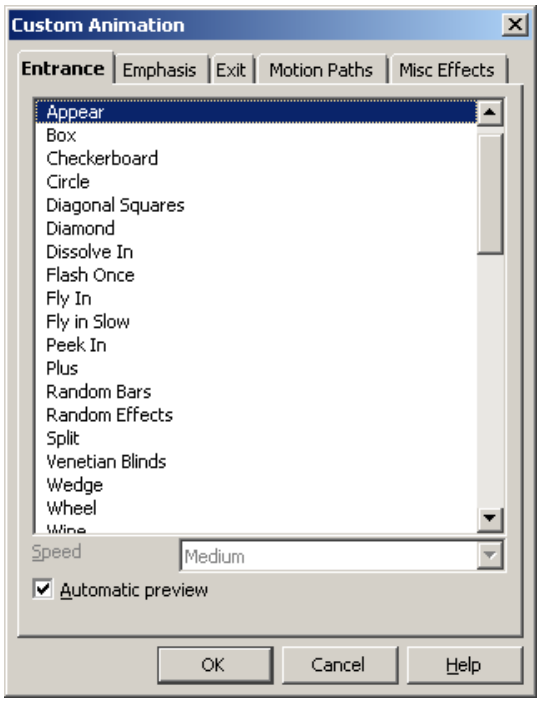


2. Select an object (for example, the title), right-click. A popup appears similar to the one below.



3. Click the option **Custom Animation…**. A **Custom Animation** sub-section appears in the **Tasks** pane (figure below left).
4. Under **Modify Effect**, click **Add…**. A **Custom Animation** dialog box appears (figure below right).
    a. **Entrance** tab: Apply effects when introducing objects on to the screen.
    b. **Emphasis** tab: Apply effects such as changing Font color, size, etc. when introducing text objects.
    c. **Exit** tab: Apply effects when you want objects to "disappear".
    d. **Motion Paths** tab: Apply moving effects to Objects.
    e. **Misc Effects** tab: Apply special effects to multimedia objects.

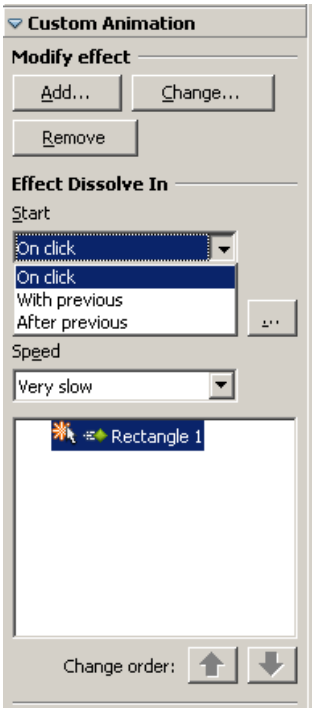




5. Select an effect, for example **Dissolve In** effect in **Entrance** tab and set the speed to **Very slow** from **Speed** dropdown list.
   Note: A preview is shown when an effect is selected; experiment to choose an effect and adjust the speed if required.
6. Click **OK**.

   Each animation has the following three choices:

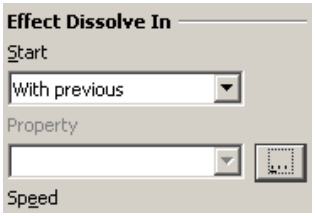
   a. **On Click**, the animation starts after a mouse click.
   b. **With Previous**, the animation runs at the same time as the previous animation.
   c. **After Previous**, the animation runs after the previous animation ends.
7. Repeat the procedure for other objects; use different effects.
8. Play the presentation (Press F5) and observe the effects applied.

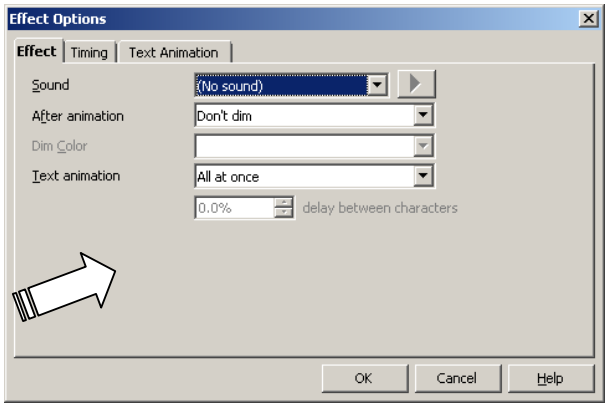


Advanced Animation Options

You can also customize the animation further by, doing the following:

1. Click **Effects Option** button () next to property (figure below, left). **Effect Options** dialog box appears (figure below, right).





2. To add a sound clip, click the dropdown arrow next to **Sound** and select a clip.
   Note: Click on the **Play** icon to preview the audio clip.
3. To adjust animation timings, select **Timing** tab and adjust values.
4. To animate text, select **Text Animation** tab and select from different options.
5. Click **OK**. Play the presentation (Press F5) and observe the effects applied.

Now try using different animation effects.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Animate the movie clip inserted in the previous session; use different effects.

ASSESSMENT

Answer the following

1. Explain the procedure to animate text and objects in a presentation.

Fill in the blanks

1. List any five effects available in Entrance tab: _____, _____, _____, _____ & _____.

SESSION 4: CUSTOMIZING A SLIDE SHOW

Learning Objectives:
At the end of this session, you will be able to:

- Customize slide shows.

RELEVANT KNOWLEDGE

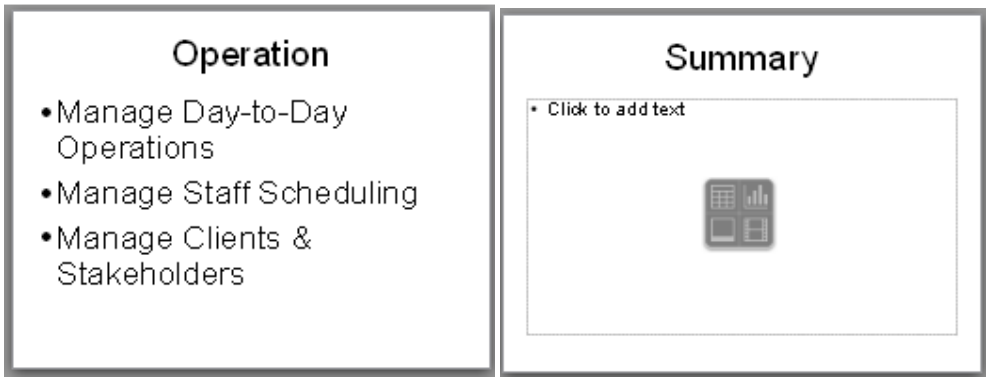
Imagine a scenario where you make a presentation for the school principal with results of classes from Nursery to Class XII. When the principal has a meeting with the primary, middle or senior school teachers, only the slides relevant to them need to be displayed. In such a case you need to customize the slide show to play selected slides.

In the example here, you will create a single presentation about different departments of an organization but present selective slides using a customized slide show.

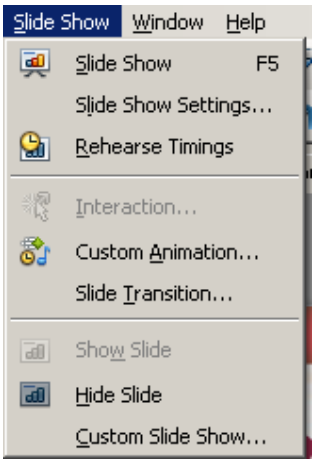
To understand customizing a slide show, do the following:

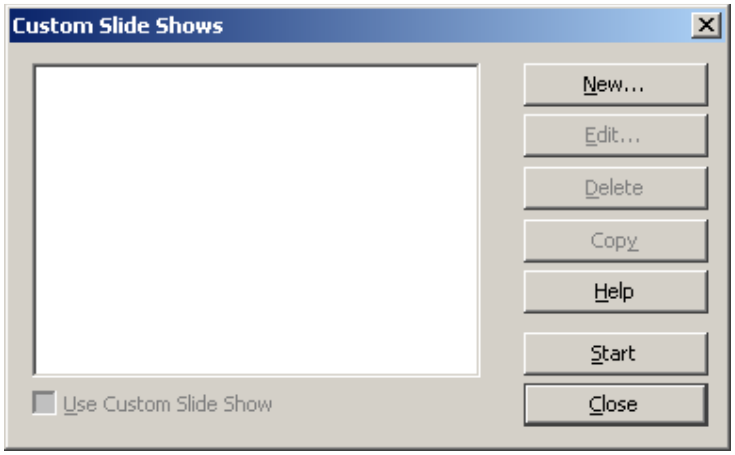
1. Create a presentation with 5-6 slides (sample below).



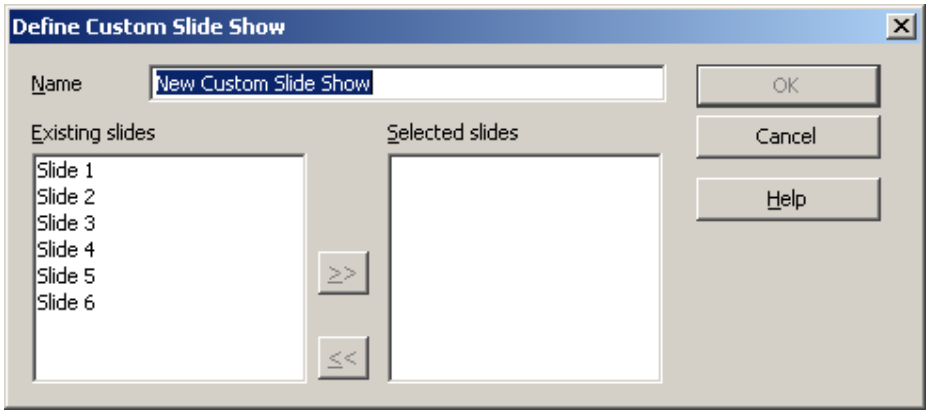


2. Select **Slide Show** menu (figure adjacent).
3. Click **Custom Slide Show…**. A **Custom Slide Shows** dialog box appears (figure below).

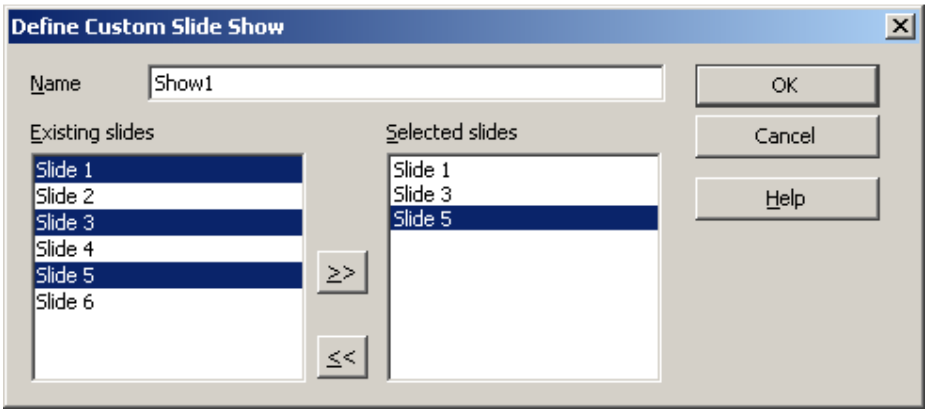




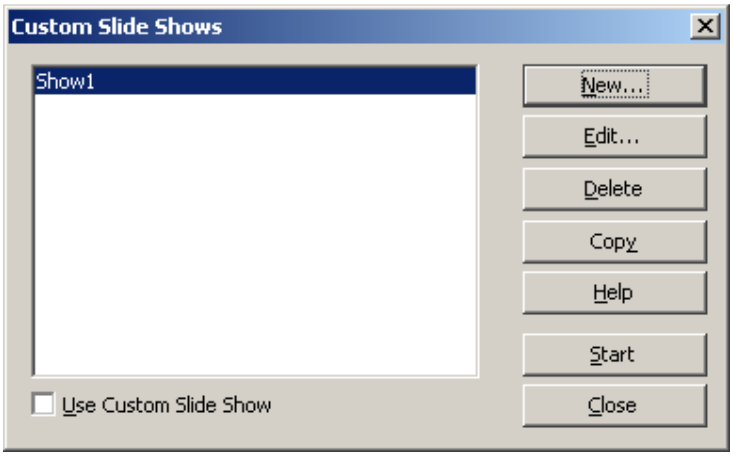
4. To create a new custom slide show, click **New…**. A **Define Custom Slide Show** dialog box appears (figure below).



5. Type a name in **Name:**, for example **Show1**. Select slides 1, 3 and 5 and click  . Notice the slides under **Selected slides** (figure below).



6. Click **OK**. Notice the custom slide show is listed (figure below).



7. Click **Start** to play this custom slide show. Notice only Slide 1,3 & 5 are displayed.

Keyboard Shortcuts

Shortcut	Description
F5 or F9	Start a slide show
Esc, Backspace	End a slide show
Right Arrow or Spacebar	Next slide
Left Arrow	Previous slide
Home	First slide
End	Last slide
B	Black screen during presentation
W	White screen during presentation

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a custom show to include selective slides of the presentations created earlier.

ASSESSMENT

Answer the following

1. Explain the procedure to create a custom slide show.

Fill in the blanks

1. Define Custom Slide Show option is available in _____ dialog box.
2. Custom Slide Show option is available in _____ dropdown menu.

SESSION 5: ANNOTATE A PRESENTATION

Learning Objectives:
At the end of this session, you will be able to

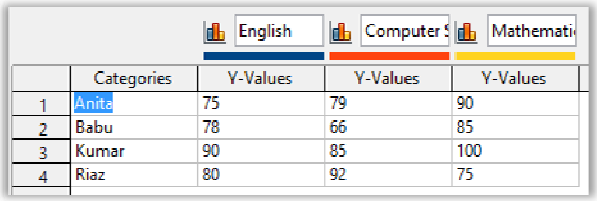
- Annotate presentations.

RELEVANT KNOWLEDGE

Annotations refer to specific key points in a presentation. When you deliver a presentation, you may want to highlight certain key points for the audience to pay special attention or to remember those key points. Imagine if you want to deliver a present a school quarterly score report to an audience, you may need to highlight the toppers in your presentation.

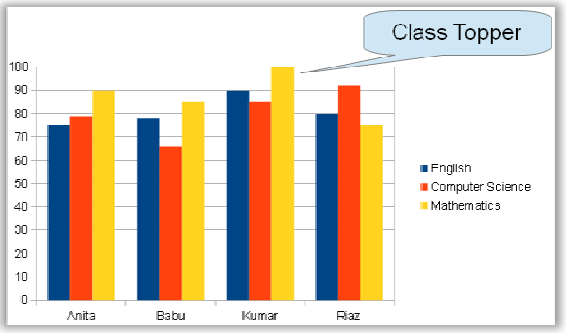
To understand how to use annotation, do the following:

1. Create a new presentation.
2. Select Insert > Chart.
3. Use the following data to populate for the chart:



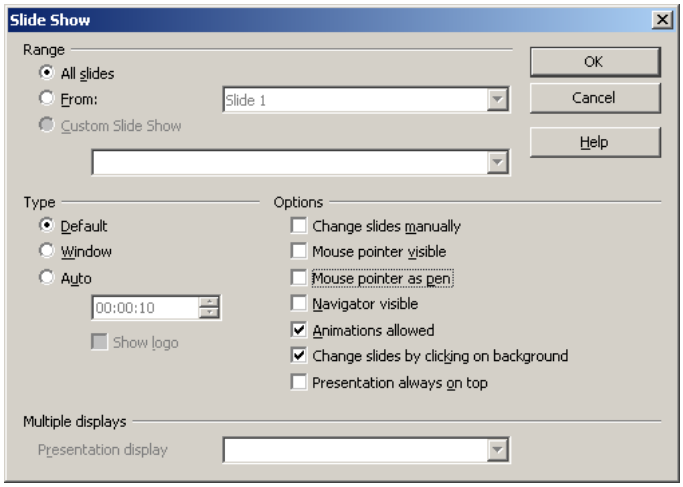
	Categories	Y-Values	Y-Values	Y-Values
1	Anita	75	79	90
2	Babu	78	66	85
3	Kumar	90	85	100
4	Riaz	80	92	75

4. To annotate, do the following:
   a. Insert a callout and type the text **"Class Topper"**.
   b. Drag the callout point to the person having the highest score (figure adjacent).



Annotating during presentation

You can annotate while making a presentation; this is possible by highlighting specific text or object (to emphasize a point) using "Annotation Pen" during a presentation.

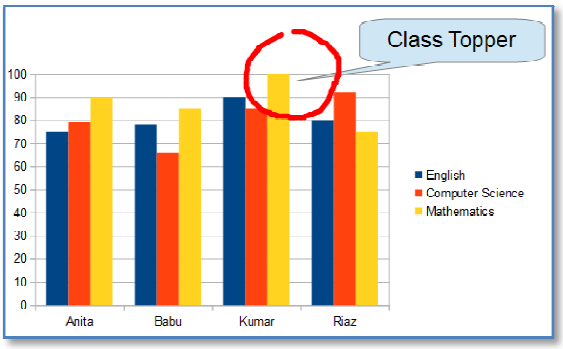


To annotate using the "Annotation Pen", do the following:

1. Select **Slide Show > Slide Show Settings….** **Slide Show** dialog box appears as shown

above.

2. Select the option **Mouse pointer as pen** and click **OK**.
3. Play the presentation (Press **F5**). Notice the cursor appears like a pen; you may highlight by drawing a circle (figure adjacent).



Tip: You can animate the callout or play a background clapping clip during this part of the presentation to attract more presentation. Try experimenting with ways of annotation and observe the results.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a slide to include a chart for displaying scores of the previous term for at least 3 subjects a. Include a rectangular callout to annotate the top three in the class. b. Present it to the class and annotate using Annotation Pen during the presentation.

ASSESSMENT

Answer the following

1. Explain the procedure to annotate a presentation using callouts.

Fill in the blanks

To use a mouse pointer as a pen, you should select _____ in _____ dialog box.

SESSION 6: USE A PRESENTER VIEW

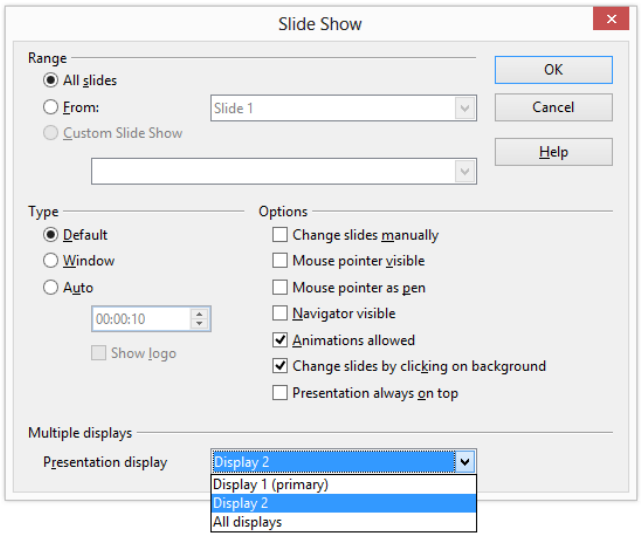
Learning Objectives:
At the end of this session, you will be able to:

- Use presenter view.

RELEVANT KNOWLEDGE

When you make electronic presentations, you can use two different monitors; one monitor/projector to exhibit the presentation to the audience and your own monitor where you can view additional notes/ documents for reference during the presentation.

In this session, you will learn to configure a presentation to run for an audience on one display medium, and at the same time, displaying other items such as notes/handouts along with the presentation on your monitor. **Note:** This requires two monitors and appropriate support using a video card. Most laptops support this facility (though not all desktops do so unless they have the requisite hardware).



1. Select **Slide Show > Slide Show Settings….** **Slide Show** dialog box appears as shown adjacent.
2. Select the second monitor from **Presentation display** dropdown list, for example **Display 2**.

Note: Display 1 (primary) refers to the computer which you are using and **Display 2** refers to an external display unit such as a second monitor or a projector.

3. Play the presentation (Press F5); notice the presentation is displayed only on the second monitor. You may now refer to other documents on your monitor during this presentation.

Presenter Screen Extension

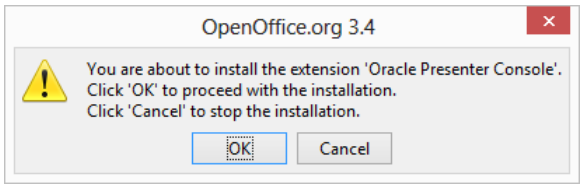
Presenter Screen is an add-on for OpenOffice.org Impress that allows you to:

a. View slides different than the audience.

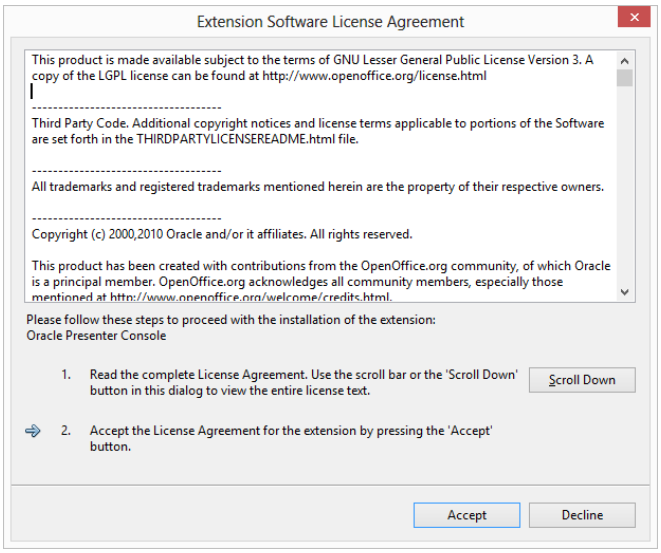
b. Preview next slide.
c. View notes of current slide.
d. View timing.
e. View navigation menu for entire presentation.

To download and install the presenter screen, do the following:

1. Go to http://extensions.openoffice.org/en/node/814/releases.
2. Select 1.1.0-Win32 (Windows) and click the download button. Save the file to the local drive.
3. Go the saved location and double-click **oracle-presenter-screen.oxt**. A dialog box appears similar to the one adjacent.



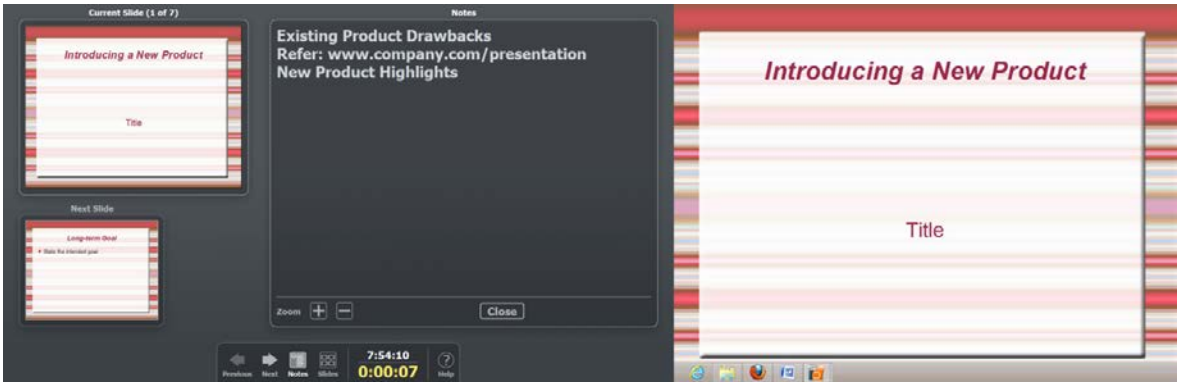
4. Click **OK**. An **Extension Software Licence Agreement** appears (figure adjacent).
5. Scroll down till the end and Click **Accept**. Click **Close**.



To use a presenter's screen, do the following:

Note: You must have two monitors.

1. Open an existing presentation.
2. Play the presentation (Press **F5**). Notice the presenter console on your computer (figure below, left) and the presentation played to the audience on the second monitor (figure below, right).



Observe the current and next slide appears on your computer along with notes; only the presentation appears on the second monitor.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Configure the slide show to display presentation on a secondary monitor.

ASSESSMENT

Answer the following

1. Explain the procedure to display the presentation only on a second monitor or a Projector.

Fill in the blanks

1. You should select _____ from presentation display dropdown list to display presentation on an external display unit.

SESSION 7: AUTOMATICALLY REPEAT A SLIDE SHOW

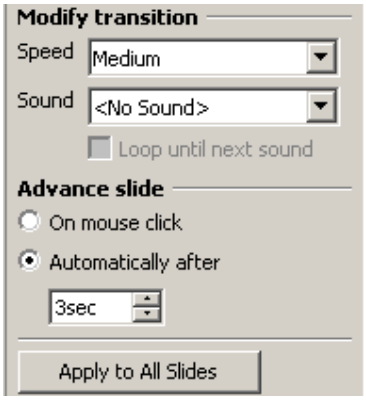
Learning Objectives:
At the end of this session, you will be able to:

- Configure a slide show to repeat automatically.

RELEVANT KNOWLEDGE

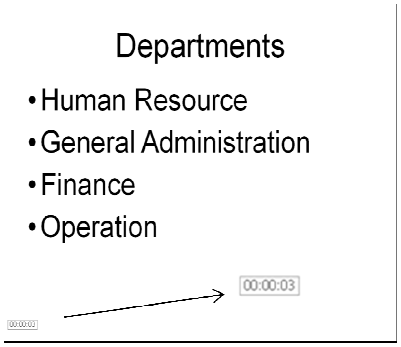
Generally when you run a slide show, to proceed from one slide to the next, you need to press a key/ click the mouse. It is also however possible to deliver a presentation without using mouse-clicks and even to configure a repeat of the presentation automatically. You may have seen a presentation being delivered without a presenter's intervention in a kiosk, trade show, etc. You may have noticed slide shows in malls, reception area in an office, etc. playing advertisement-like slide shows. These are all played using the automated feature of presentation software.

To configure a presentation to advance slides automatically, you need to define the display timing for each slide.



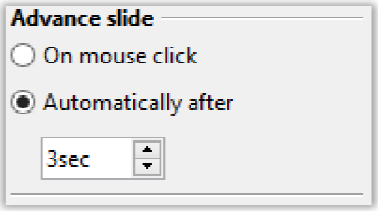
To define specific timing for **all** slides, do the following:

1. Open an existing presentation.
2. Select **Slide Show > Slide Transition….**
3. Under **Advance Slide**, select **Automatically after** to set a time. For example, 3 seconds.
4. Click **Apply to all Slides**.
5. Play the presentation (Press F5). Notice the slide advancing to next slide automatically after 3 seconds.



To define specific timing for **each** slide, do the following:

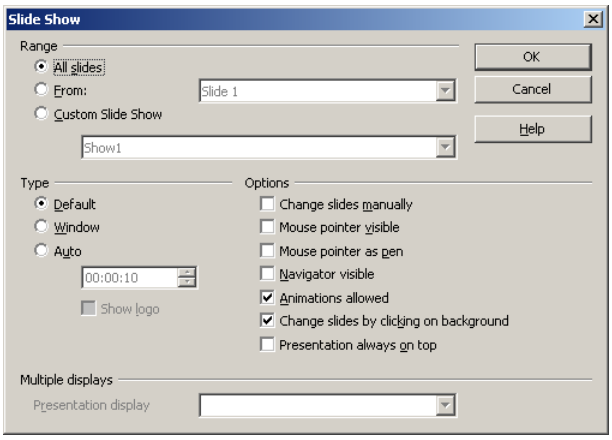
1. Select **Slide Show > Rehearse Timings**.
2. Slide show starts with a timer displayed at the left-bottom corner of the screen.
3. Click when you want to advance to the next slide after a specific duration; repeat the process for all slides.
4. Save the presentation. Impress displays the recording duration along with the slides, switch to Normal and observe the timing



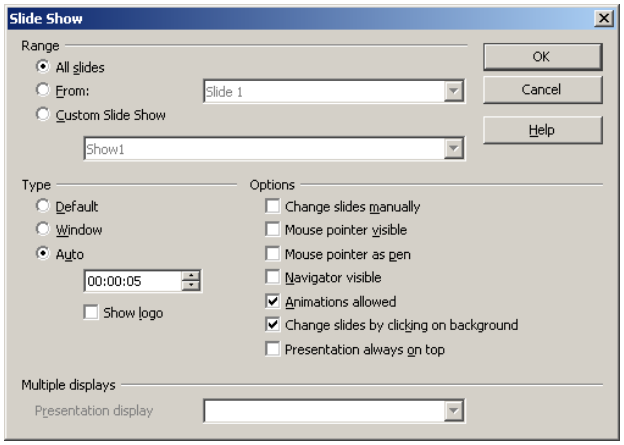
under **Automatically after** option in each slide (figure adjacent).

5. Play the presentation (Press F5). Notice the slide advancing to next slide based on the timing set for each slide.

If you want to repeat the slideshow once again when the presentation is complete (loop the presentation), do the following:



1. Select **Slide Show > Slide Show Settings…. Slide Show** dialog box appears (figure adjacent).
2. Select **Auto** under **Type**; type in the duration for repeating the slide show. For example 5 seconds (figure below).



3. Click **OK**. Play the presentation (Press F5).
4. A window appears similar to the one below.
5. Notice the countdown at the right-top corner; also notice the slide show repeats from the first slide after the count down.



Using Microsoft PowerPoint

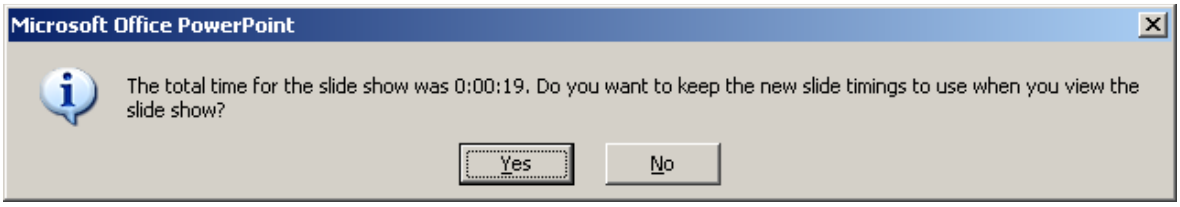
To set up a slide show to repeat automatically in Microsoft PowerPoint, do the following:

1. Open an existing presentation.
2. You need to include timing for slides to automatically move from one slide to another. Select **Slide Show** tab.
3. Click **Rehearse Timings** in **Set Up** group (figure adjacent).





4. **Rehearse** toolbar (figure adjacent) appears along with the Slide Show.
5. Click **Next** to move to the next slide after a particular duration for each slide. For example, click every 5 seconds.
6. Once you have reached the last slide, click **Close** in the **Rehearsal** button. A popup appears as shown below displaying the total timing for this slide show.



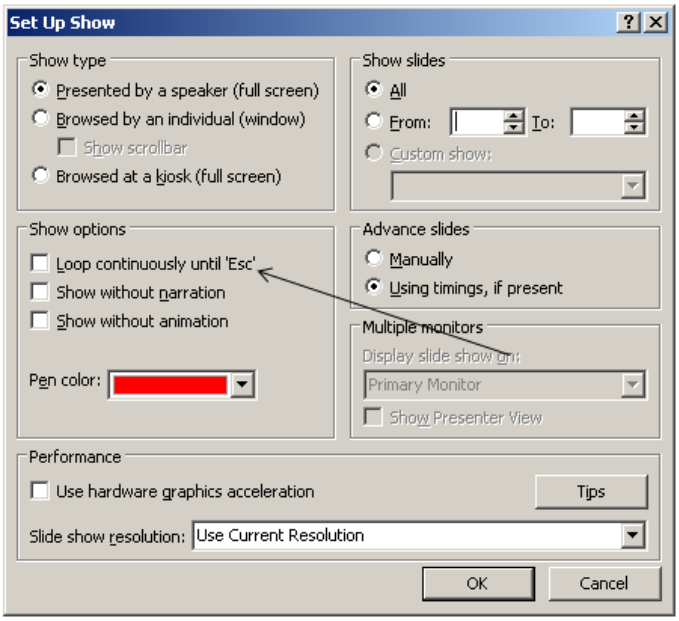
7. Click **Yes**. Go to **Slide Sorter** View.



8. Notice the timing displayed next to the slides (figure above).
9. Now play this presentation (F5). Notice the slide advancing every five seconds.

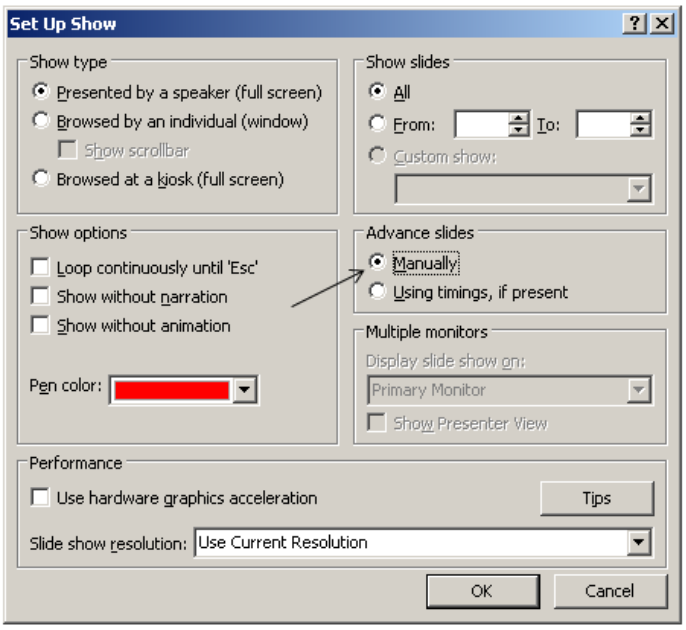
If you want the slide show to repeat once again from the beginning after the last slide, do the following:

1. Select **Set Up Slide Show** in **Set Up** group.
2. Check **Loop continuously until 'Esc'** under **Show Options** (figure adjacent).



If you want to view the presentation manually after including rehearses timing, do the following:

1. Select **Set Up Slide Show** in **Set Up** group.



2. Select **Manually** in **Advance Slides** section (figure above).

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Apply slides to automatically advance every 10 seconds for the presentations created in previous sessions; repeat the slide show after 3 seconds.

ASSESSMENT

Answer the following

1. Explain the procedure to advance slides automatically after a specific duration.
2. Explain the procedure to advance each slide with a custom timing (manual).

Fill in the blanks

1. Rehearse timing option is available in _____ dropdown menu.

E-MAIL MESSAGING

SESSION 1: SEND CALENDAR INFORMATION IN AN E-MAIL MESSAGE

Learning Objectives:

You have learnt to use e-mail messaging software to send, receive and format e-mail messages, insert hyperlinks, and sort and filter messages, etc. You have also learnt to use your calendar software to manage events and tasks, change work weekdays, manage task requests, etc.

Now, in this module, you will learn about sending calendar information via e-mail, send personalized e-mails, organize e-mails, manage data files, delegate e-mail and calendar access.

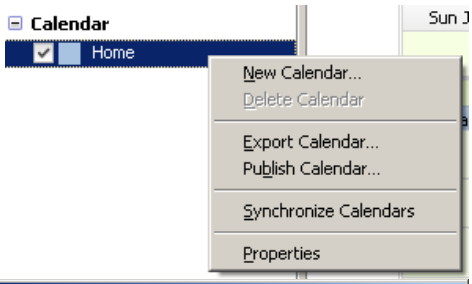
At the end of this session, you will be able to:

- Send calendar information in e-mail message.

RELEVANT KNOWLEDGE

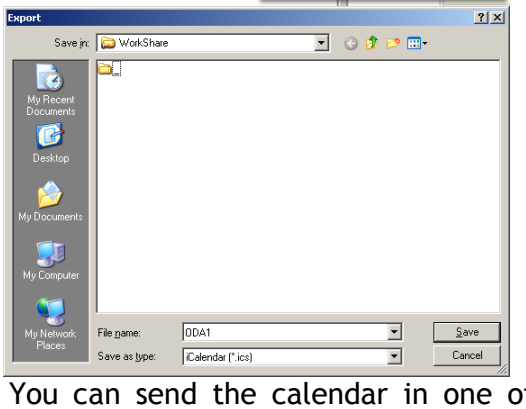
You have learnt to schedule appointments earlier using calendar software. Now, imagine a situation where you are heading a team and want to appoint a team member to participate in official meetings in your absence. You can create the events and/or tasks in your calendar and send the information to a team member to attend the meeting.

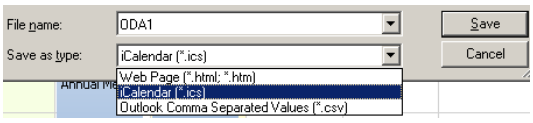
To start learning about send calendar information in e-mail message, first, open your calendar software and create few appointments in it.



To send the calendar, do the following:

1. Right-click **Calendar**, a popup appears as shown adjacent.
2. Click **Export Calendar…** (figure above). **Export** dialog box appears (figure adjacent).
3. Select **Save as type:** dropdown menu (figure below).





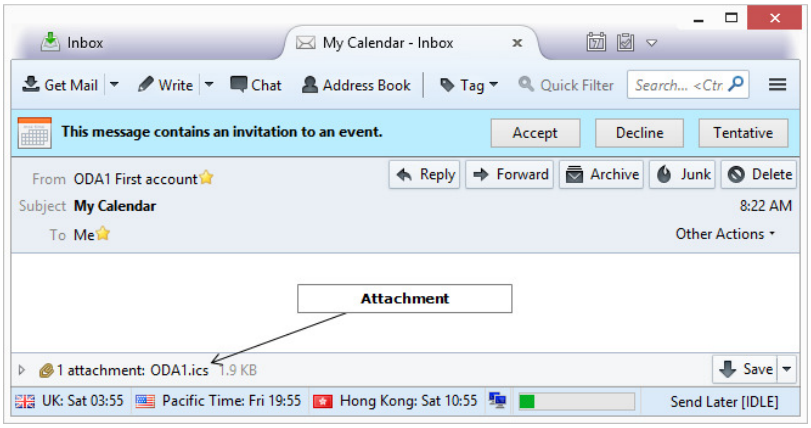
You can send the calendar in one of

the three following formats:

a. **iCalendar (.ics)**, a popular format supported by most calendar software.
b. **Web Page (.htm or .html)**, to publish in personal or company websites (for example, you can publish training or public events through your website).
c. **Outlook Comma Seperated Values (.CSV)**, a format supported for use with Microsoft Outlook.

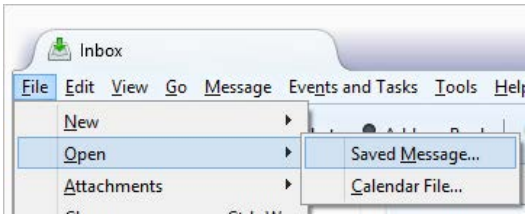
4. Select **iCalendar (.ics)**.
5. Type a name in **File name:**. (For example, type your name as you are sharing your calendar; this will be easy for others to identify).
6. Click **Save** and send this calendar as an attachment to your classmate.

Recipients when they receive this mail will see a window similar to the one below:

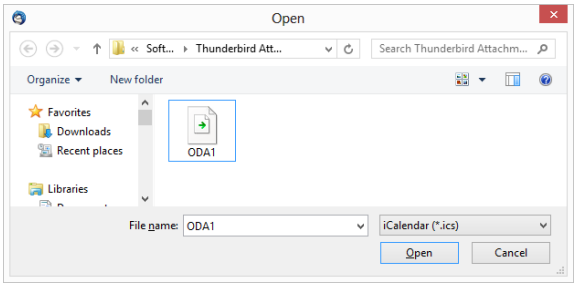


You too would have received an e-mail from one of your classmates. Download and save the attachment.

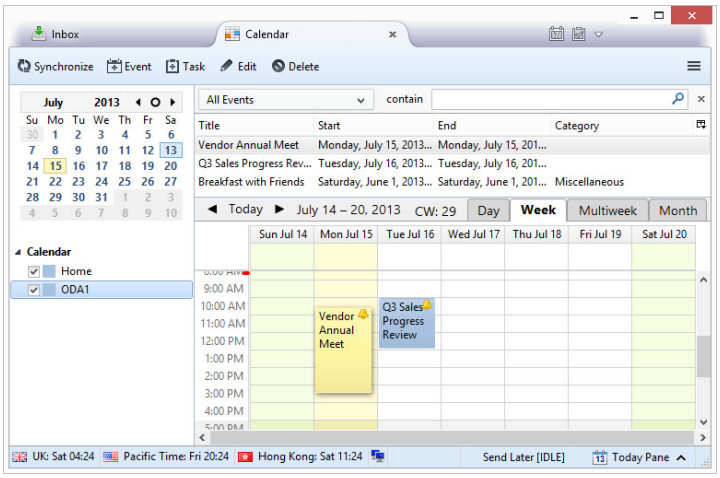
Now to import this into your calendar, do the following:



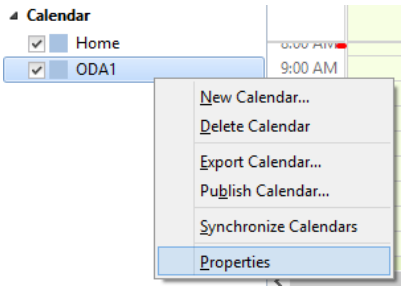
1. Select **File** Menu (figure adjacent).
2. Select **Open > Calendar File**….An **Open** dialog box appears (figure adjacent).
3. Browse and select the attachment. Click **Open**.
4. Select **Events and Tasks > Calendar**. Notice both the calendars are displayed (figure below).

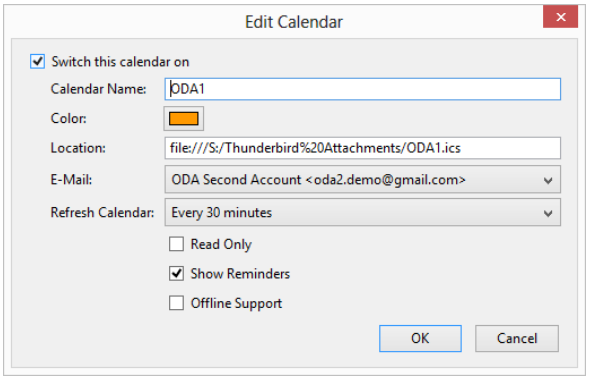


You may change the color of the other calendar to differentiate both the calendars. To change the color, do the following:

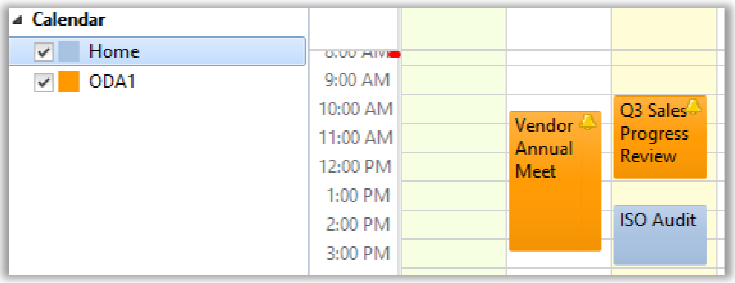


1. Right-click the second calendar. A popup appears similar to the one below (left).





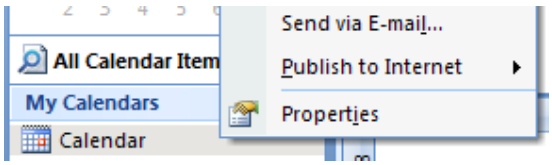
2. Click **Properties**. **Edit Calendar** dialog box appears (figure above right).
3. Choose a color from **Color:** dropdown palette and click **OK**. Notice both the calendars and the calendar items are displayed in different colors (figure adjacent).



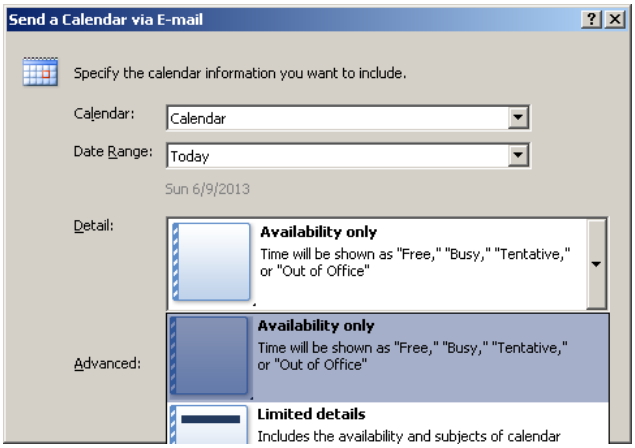
Using Microsoft Outlook

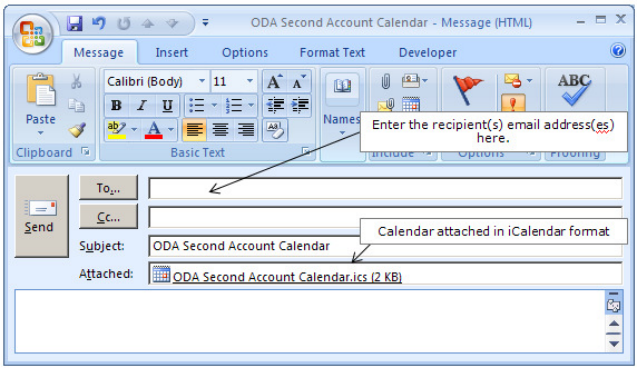
You can also send a calendar using Microsoft Outlook.

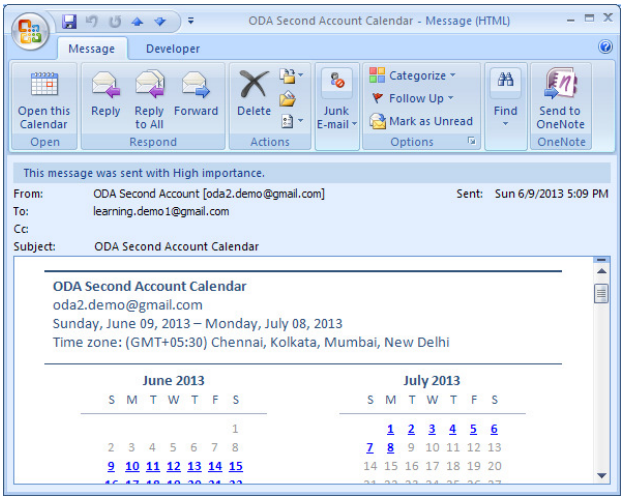
1. Open Outlook, Select **Go > Calendar**.
2. Right-click **Calendar** under **My Calendars** (figure adjacent).

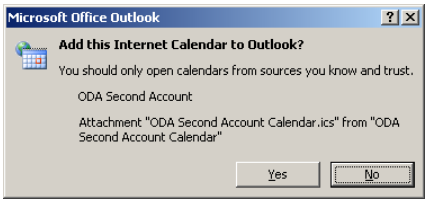


3. Click **Send via E-mail…**. A **Send a Calendar via E-mail** popup appears (figure adjacent).
    a. Select the duration from **Date Range:** dropdown, for example Next 30 Days.
    b. Select the amount of detail from **Detail:** dropdown, for example Full Details.
    c. Click **OK**. Notice the calendar is attached in iCalendar format (figure adjacent).
4. Type the recipient's e-mail address in **To…**. Click **Send**.
5. Recipients receive the e-mail with the calendar as shown adjacent - below.
6. Select **Open this Calendar** in **Open** group (figure adjacent). You will see a popup similar to the one below for adding the sender's calendar to your software.

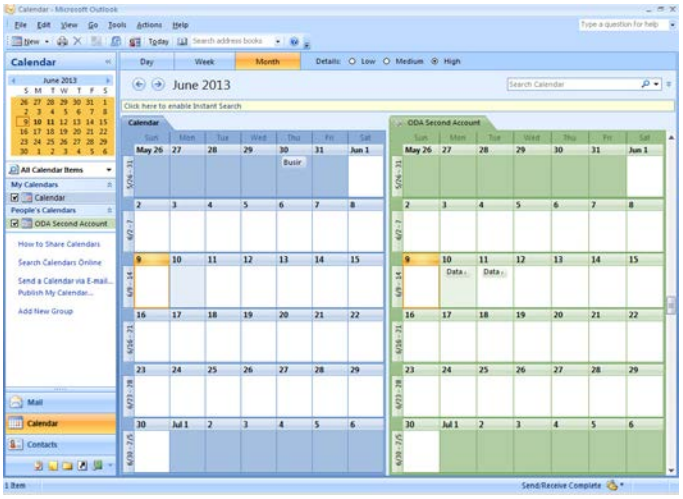




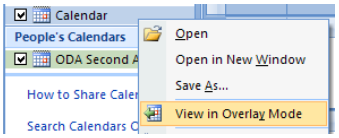




7. Click **Yes**. Notice the sender's calendar appears side-by-side along with your calendar (figure adjacent).

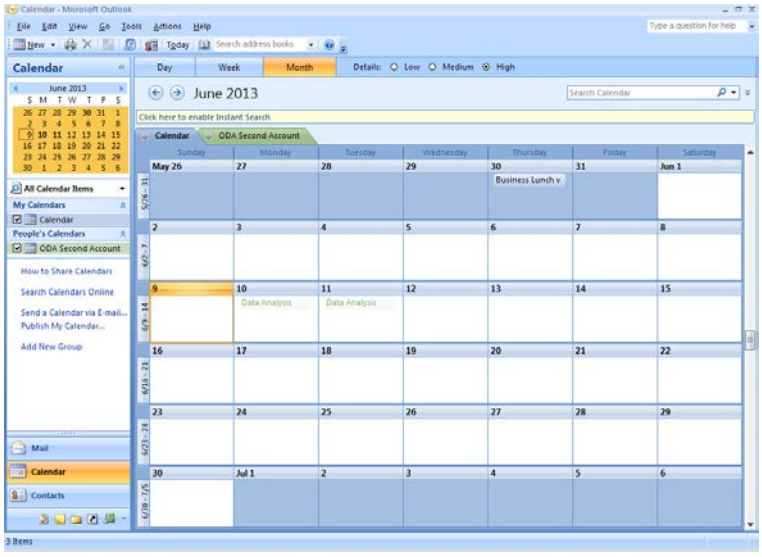


   a. If you want to include items from the senders' calendar, select the item from the senders' calendar, drag and drop it in your calendar!



   b. To view in overlay mode, right-click your calendar under My Calendar and select **View in Overlay Mode.**

   c. Notice the senders' calendar is displayed in overlay mode (you can see their schedule in your calendar as shown below).



EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Schedule the following events in your calendar: a. Team Outing Discussion, 10 AM – 12 PM (One-time meeting, use a date of your choice). b. Annual Exam Preparation, 5 PM – 8 PM (Every Wednesday and

	Friday, recurring until exam schedule). Share this calendar with your classmates.

ASSESSMENT

Answer the following

1. Explain the procedure to share a calendar (using .ICS format).

Fill in the blanks

1. Formats supported when exporting calendar are: _____, _____ & _____.
2. File extension for iCalendar files: _____ .

SESSION 2: CUSTOMIZING THE QUICK ACCESS TOOLBAR

Learning Objectives:

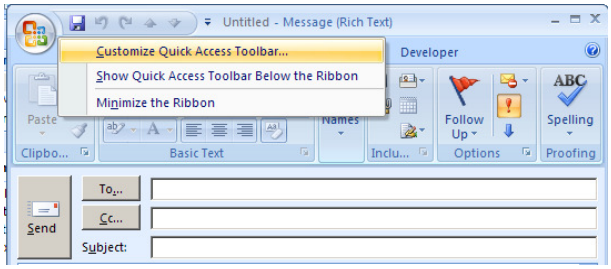
At the end of this session, you will be able to:

- Customize the quick access toolbar – a feature available in Microsoft Outlook.

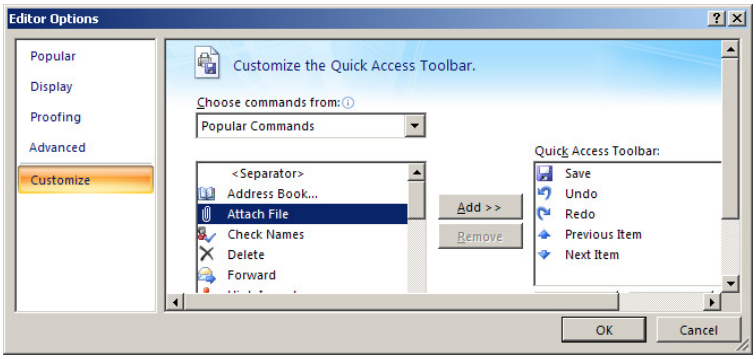
RELEVANT KNOWLEDGE

You have learnt to work with various options in the e-mail messaging software. You can add shortcuts (referred to as commands) to items that you frequently use to the quick access toolbar for convenience. You can also include shortcuts for commands that are not available on any of the default tabs but can be accessed through a series of steps. For example, if you frequently use clip arts in your e-mails, you can add the shortcut or Clip Art command to the quick access toolbar.

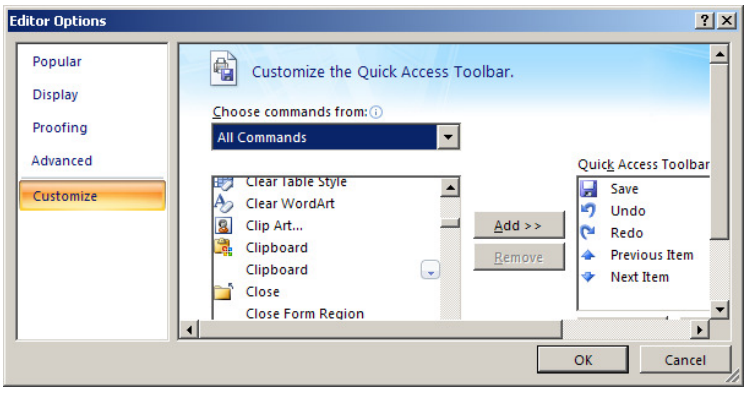
To customize the quick access toolbar, do the following:



1. Select **File > New > Message** (this is to access the Quick Access Toolbar).
2. Right-click on the **Office Ribbon** (figure above), click **Customize Quick Access Toolbar….** An **Editor Options** dialog box appears (figure adjacent).

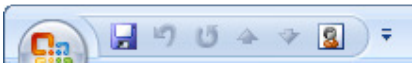


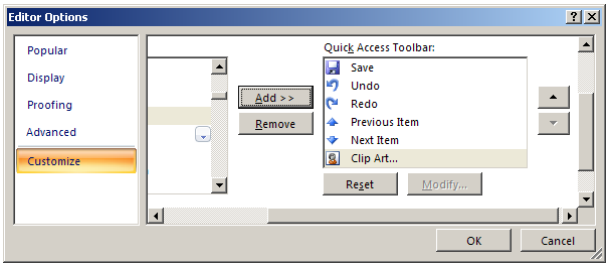
3. You can select commands from **Choose commands from:** dropdown menu. For example, to add clip art, select **All commands** from **Choose commands from:**



dropdown menu. Scroll and select **Clip Art…** from list (figure above).

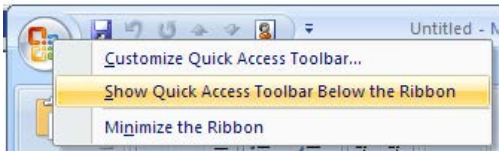
4. Click **Add** button. Notice the **Clip Art** is added to the **Quick Access Toolbar** list (figure below, right).
5. Click **OK**. Notice the **Clip Art (icon)** command is displayed in the quick access toolbar (figure below, left).

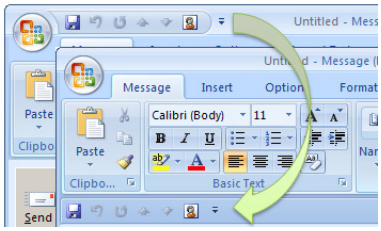




Quick access toolbar is displayed at the top by default. However, to move its position, for example closer to the work area (just above the mail message area), do the following:

1. Right-click on the **Office Ribbon** and click the option **Show Quick Access Toolbar Below the Ribbon** (figure adjacent).
2. Notice the **Quick Access Toolbar** displayed near the work area (figure adjacent).



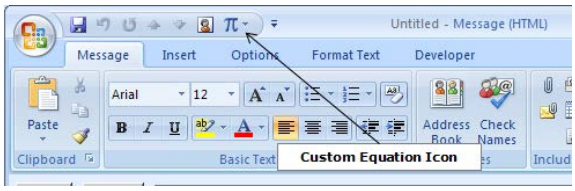


Now try adding more commands to the Quick Access toolbar.

Adding commands not available in default tabs

Not all commands are accessible through default tabs (Message, Insert, Options or Format Text tabs). To see a list of commands not available in default tab, do the following:

1. Select **File > New > Message** (this is to access the Quick Access toolbar).
2. Right-click on the **Office Ribbon** and click **Customize Quick Access Toolbar…**. An **Editor Options** dialog box appears.
3. Select **Commands not in Ribbon** from **Choose commands** from dropdown menu. Notice the list of commands (figure above).
4. To add, select a command from this list. For example, select **Custom Equation** and click **Add**. Click **OK**. Notice the command **Custom Equation** added to the quick access toolbar.



EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Customize the toolbar to include the following commands: a. Paste Special. b. Theme Colors. c. Page Color. d. Show BCC

ASSESSMENT

Answer the following

1. Explain the procedure to add commands to quick access toolbar with an example.

Fill in the blanks

1. Customize Quick Access Toolbar option can be accessed through _____.

SESSION 3: USING STATIONERY AND THEMES

Learning Objectives:
At the end of this session, you will be able to:

- Personalize e-mails using stationery and themes.

RELEVANT KNOWLEDGE

You may have noticed attractive newsletters sent to your e-mail address promoting products, clearance sales or promotional offers. If you observe, some of them are so attractive that you view the e-mail even though you are not really interested. Also, most of them have hyperlinks to websites or e-mail addresses! If you too want to send such attractive e-mails to your customers or friends, you need to use HTML formatted e-mail messages. E-mail messaging software includes support for creating HTML messages through a feature called *"Stationery"*. Stationeries are pre-defined designs which you can replace with your own text or images; you can also create your own templates if you are comfortable with HTML.

To work with stationeries, you need the following:

a. Stationary Add-on.
b. HTML Templates.

Downloading and Installing the Stationery Add-on

1. Open your e-mail messaging software.
2. Select **Tools > Add-Ons**.
3. Search for **Stationery 0.7.8**.
4. Click **Install** and click **Restart Now**.

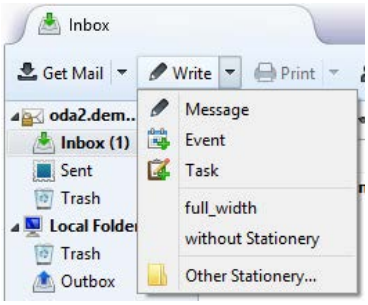
Note: Stationery add-on does not include any templates. However, you can either use HTML templates downloaded from websites or your own HTML templates.

Use the following websites to download HTML templates:

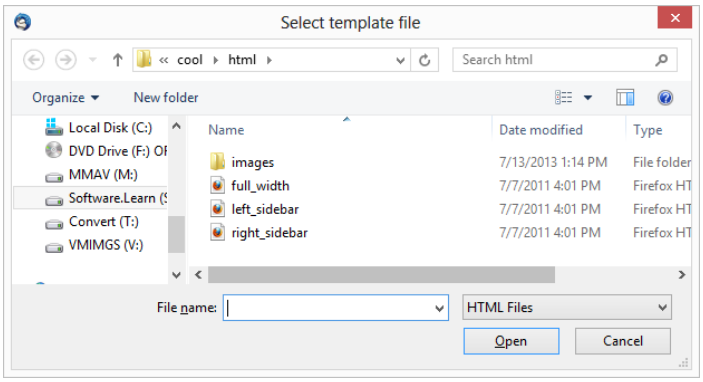
a. http://www.campaignmonitor.com/templates/all/
b. http://www.activecampaign.com/templates/
c. http://www.eblastmagic.com/free-templates.html
d. http://www.benchmarkE-mail.com/resources/Free-HTML-E-mail-Templates
e. Use Google to find more HTML templates!

Usually templates contain HTML, CSS & Images compressed as a single .ZIP file; once you download a template, unzip them to a folder in your computer.

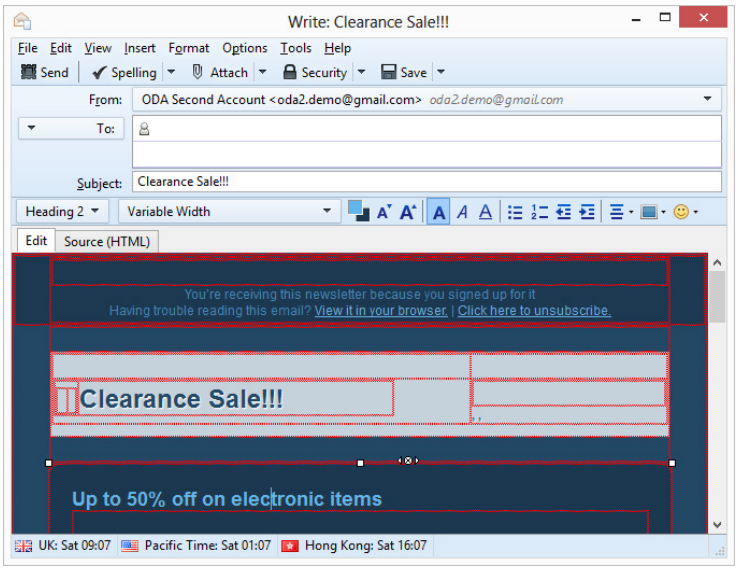
To use this template, do the following:



1. Select **Write** dropdown menu.
2. You need to select the HTML file (template); click **Other Stationery….** A **Select template file** dialog box appears (figure below).
3. Browse and select the HTML file; usually there is only one HTML file named as "index.htm" or "default.htm". You can preview the template by opening in the web browser to experiment before using that as an e-mail template! In this example, the file name is "full_width.htm".

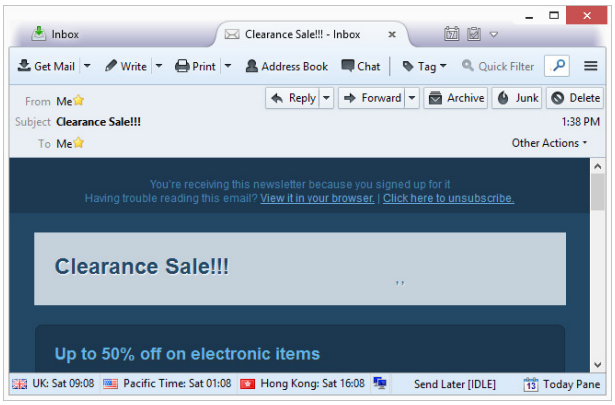


4. Once you select the HTML file, click **Open**. Observe the results displayed (figure adjacent).



5. Templates may have placeholders and dummy content that can be replaced with your own text. Replace the text in this template and include content as required.
6. Once complete, type the e-mail addresses and subject. Click **Send**.

Recipients will be seeing an e-mail similar to the one adjacent.

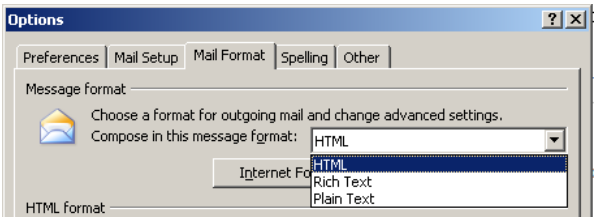


Tip: Since these letters use HTML code, try inserting videos using HTML code!

Using Microsoft Outlook

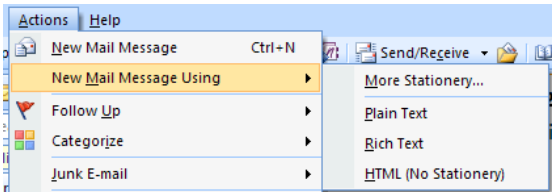
Note: You must have the e-mail message format set to HTML.

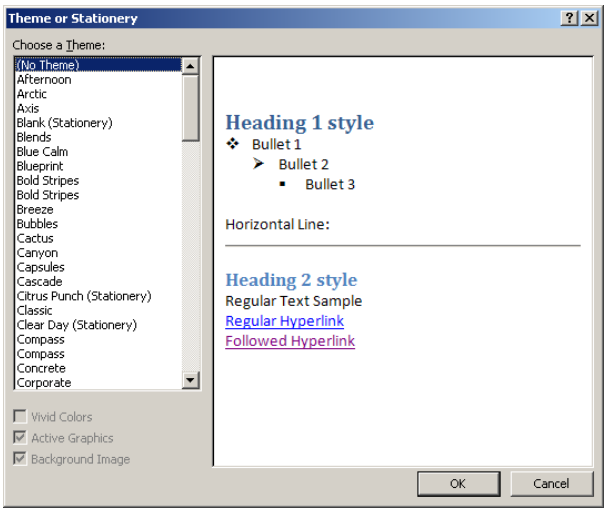
1. Select **Tools > Options.**
2. Select **Mail Format** tab.
3. Select **HTML** from **Compose in this message format:** dropdown list (figure adjacent).
4. Click **OK**.

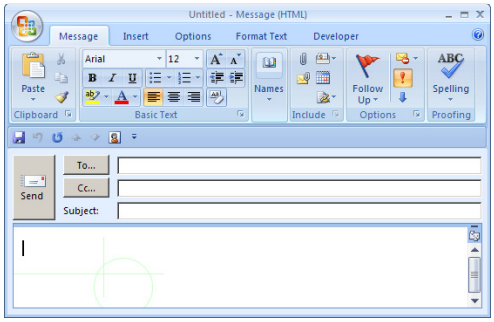


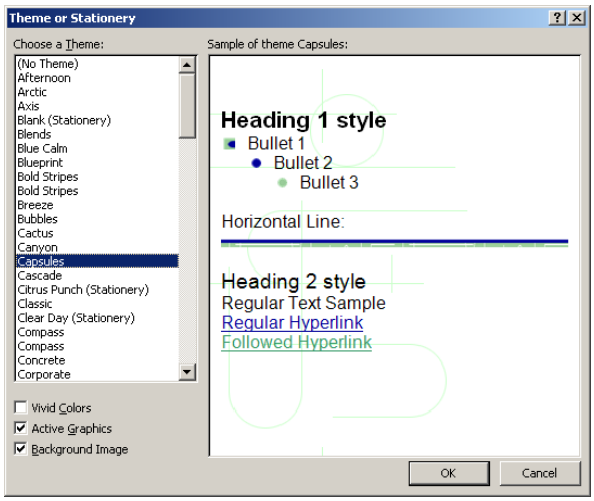
To use stationary **for a single E-mail message (one time activity)**, do the following:

1. Select **Actions** dropdown menu (figure above).
2. Select **New Mail Message Using**, click **More Stationary….**A **Theme or Stationary** dialog box appears (figure adjacent).
3. Select a theme from this list, for example **Capsules**. Notice the preview displayed on the right pane (figure below right).
4. To use this theme, click **OK**. Notice a new mail message is created based on this theme (figure below left).

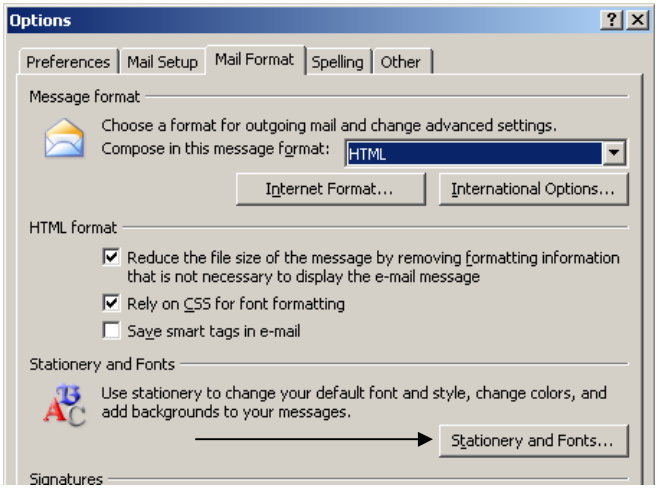




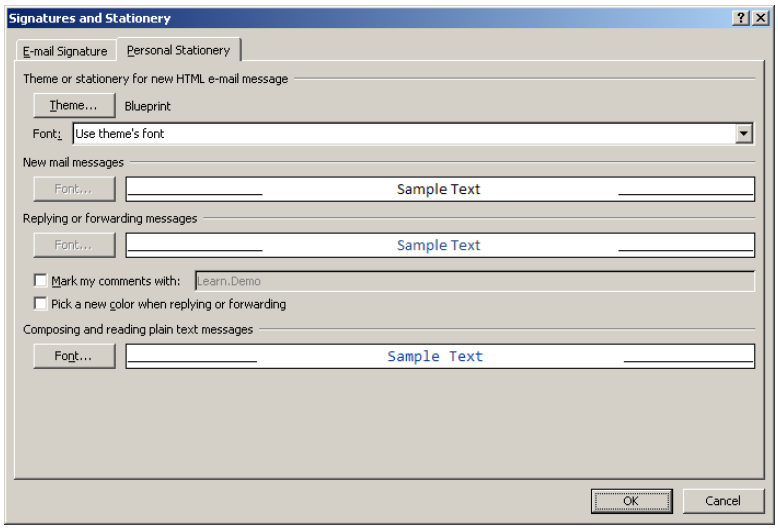


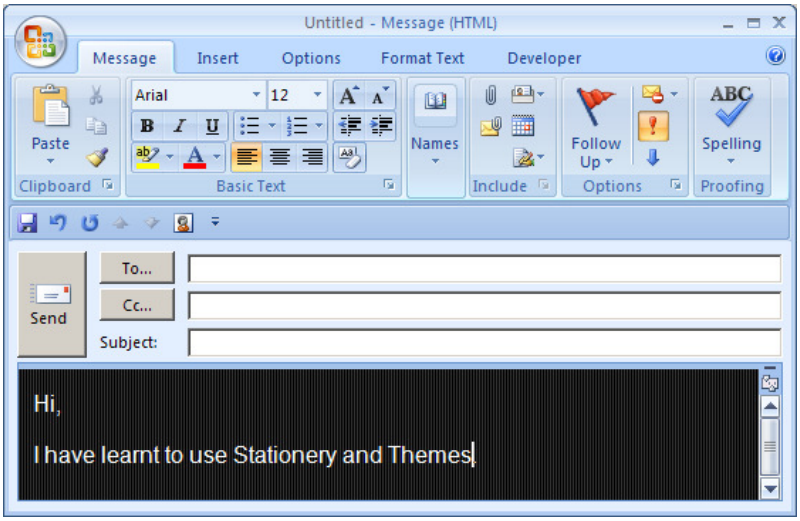


To set a theme for all mail messages, do the following:



1. Select **Tools > Options.**
2. Select **Mail Format** tab.
3. Select **Stationery and Fonts…** (figure adjacent). Signatures and Stationery dialog box appears (figure below).
4. Click **Theme** Button. A **Theme or Stationary** dialog box appears, scroll and select a theme. For example, **Compass.**
5. Click **OK** thrice.
6. Select **File > New >Mail Message.** Notice the mail message created based on this theme (figure below).





Note:

1. Stationery or themes cannot be customized.

2. Stationery or themes cannot be applied to replies.

Now use other themes for practice.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a newsletter on any of the following topics: a. Harmful effects of plastic bags. b. Wind energy. c. Causes of Uttrakhand disaster. d. Disaster management Use Microsoft Express Web to create a single page HTML newsletter, include hyperlinks, images and relevant videos; send this newsletter to your classmates.

ASSESSMENT

Answer the following

1. Explain the purpose of stationeries.
2. Explain the procedure to send a HTML formatted message.

Fill in the blanks

1. List any three websites that offer free HTML e-mail templates.

SESSION 4: CREATING AND MODIFYING SIGNATURES

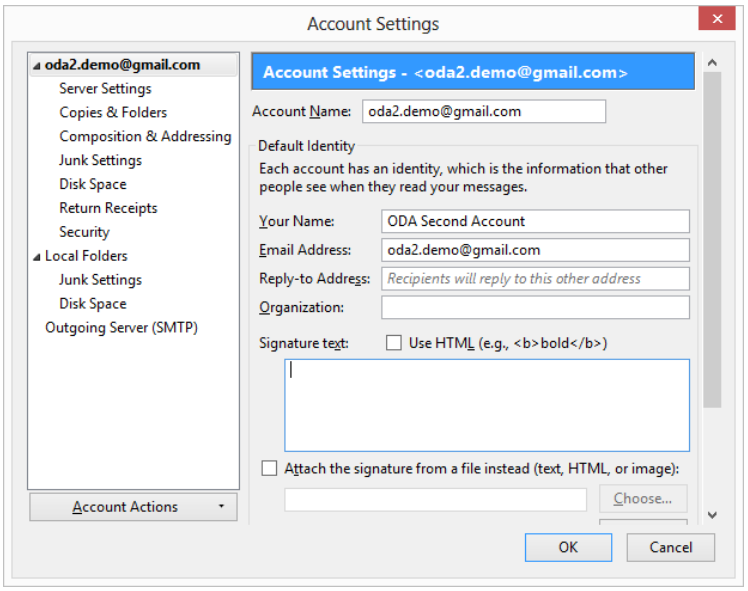
Learning Objectives:
At the end of this session, you will be able to:

- Create and modify signatures.

RELEVANT KNOWLEDGE

e-mail signatures usually display name, designation, contact information, etc. and are visible at the end of e-mails. Once created, e-mail signatures are automatically included when you compose a mail. An e-mail signature can be a combination of text and images.

To create a signature, do the following:



1. Open your email messaging software.
2. Select **Tools > Account Settings**. An **Account Settings** dialog box appears.
   a. To use plain text,
      i. Type your name and contact details in **Signature text:** textbox.
      ii. Click **OK**.
      iii. Select **File > New > Message**. Notice the signature appearing in plain text format (figure adjacent).

```
--
regards,
Arun Kumar.
+91 9000012345
```

   b. To use HTML text,
      i. Check Use HTML (e.g., bold)
      ii. Type the following in the **Signature text:** textbox.

```
regards,<br>
<b>Arun Kumar.</b><br>
<i>+91 9000012345</i>
```

      iii. Click **OK**.

--
regards,
Arun Kumar.
+91 9000012345

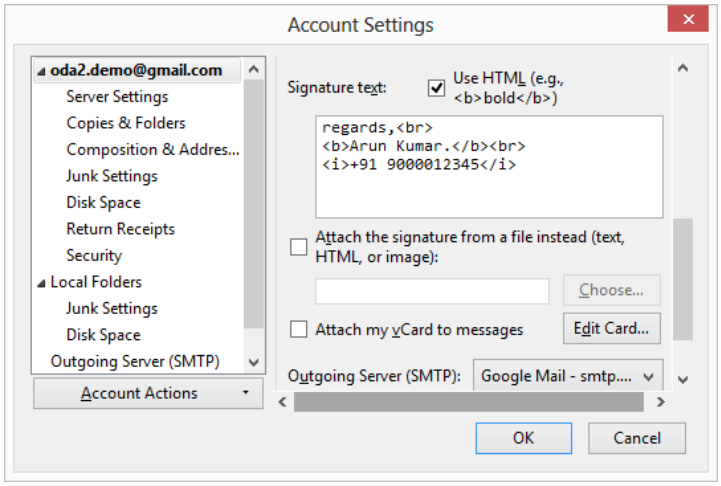
iv. Select **File > New > Message**. Notice the signature appearing in HTML format.

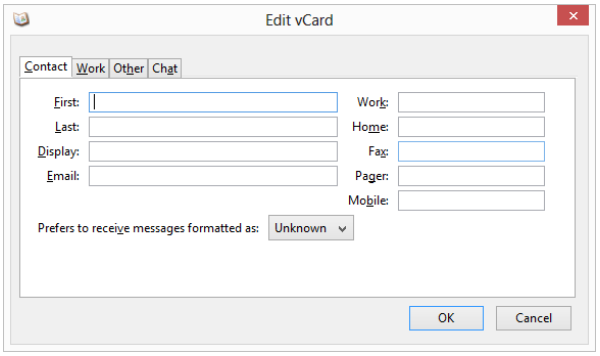
Attaching a vCard

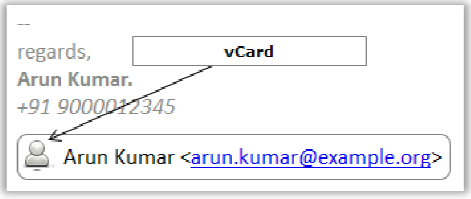
You can also attach an electronic business card to e-mail messages. A vCard is a file format standard widely used for electronic business cards and is supported most e-mail messaging software. Similar to normal business cards, electronic business cards are usually stored with the address book of the e-mail messaging software.

To attach vCard automatically for all outgoing messages, do the following:

1. Select **Tools > Account Settings**. **Account Settings** dialog box appears (figure adjacent).
2. Check **Attach my vCard to messages** (figure above).
3. Click **Edit Card….Edit vCard** dialog box appears (figure below).
    a. Type your first name in **First:**
    b. Type your last name in **Last:**
    c. Type your email address in **Email:**
    d. Type your cell phone number in **Mobile:**
    e. Click **OK**.
4. Compose a new mail message and send it to a recipient.



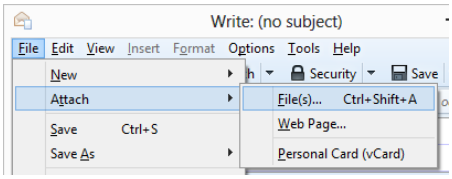




Recipients will receive the mail similar to the one below with the vCard attached (figure below). Recipients can add this vCard to their address book by clicking on the  icon.

To include vCard for selective emails, do the following:

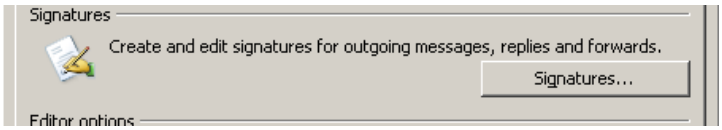
1. Select **Tools > Account Settings**. The **Account Settings** dialog box appears.
2. Uncheck the option **Attach my vCard to messages**.
3. Click **OK**.
4. Select **File > New > Message**.
5. Select **File > Attach > Personal Card (vCard)**.



Using Microsoft Outlook

To set up a signature, do the following:

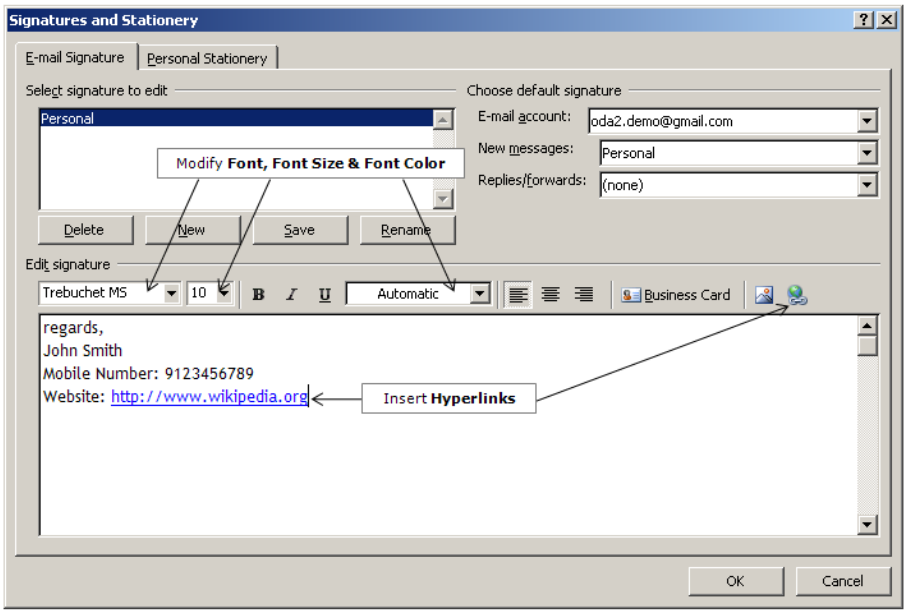
1. Select **Tools > Options.**
2. Select **Mail Format** Tab.



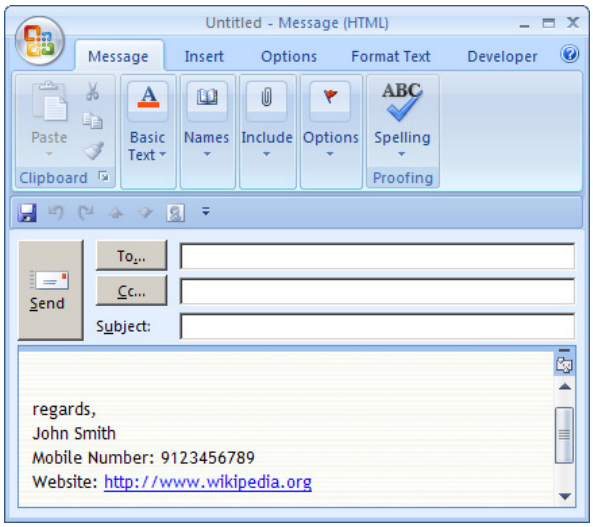
3. Click **Signatures**. The **Signature and Stationery** dialog box appears.
   a. Click **New** to create a new signature. A **New Signature** popup appears. Enter a name for the signature for example, Personal.



   b. Click **OK**. You can use the **Edit signature** area to include text, hyperlinks and images (refer figure below).



4. Click **OK** twice when done.

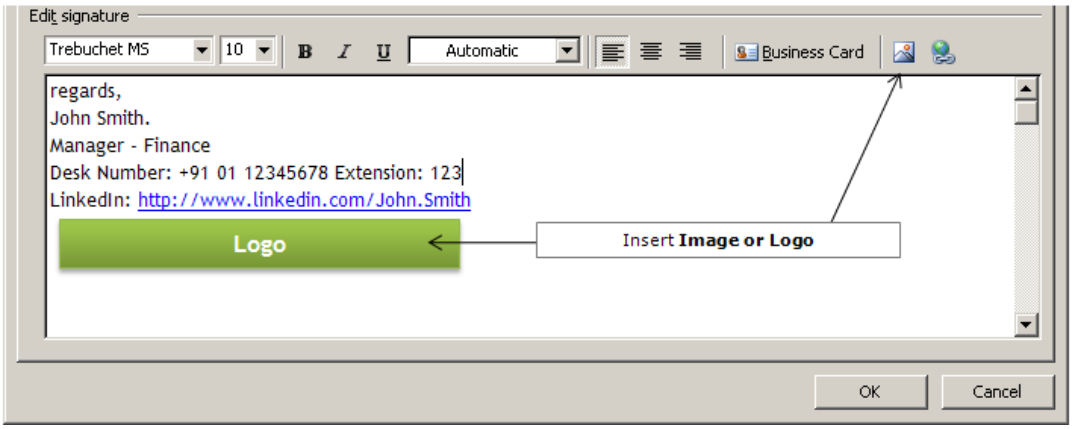


To use this signature, select **File > New > Mail Message…**. Notice the signature at the end of the mail message (figure adjacent).

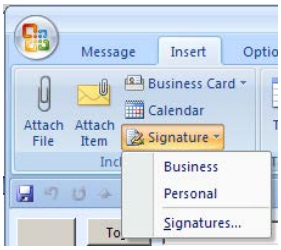
Creating a second signature

You may use your e-mail software to send personal business mails. To do so, you can create and use an alternate signature for business mails. To create another signature,

1. Select **Tools > Options.**
2. Select **Mail Format** tab.
3. Click **Signature**. click **New**, enter the name as **Business** and click **OK**. Create a signature similar to the one below.



4. Click **OK** twice when done.
5. Select **File > New > Mail Message**. Select **Insert** tab, select **Signature** dropdown arrow (figure below).
6. Notice both the signatures are displayed. Select **Business** from **Signature** dropdown arrow, notice the business signature inserted in the e-mail signature area.

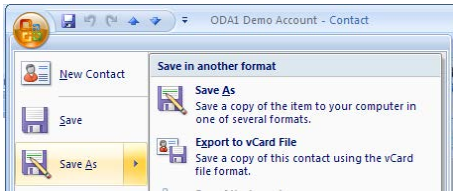


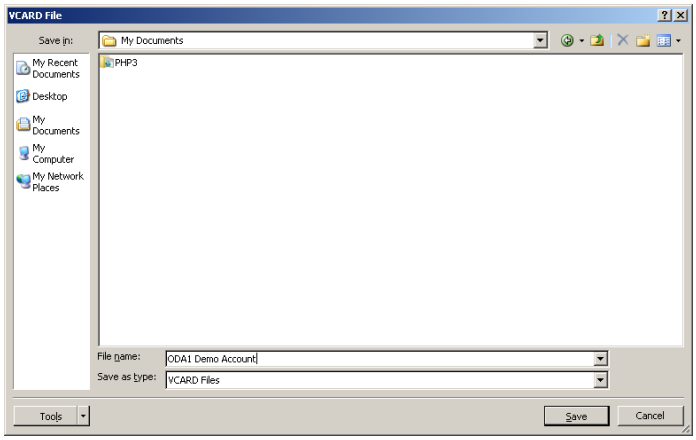
Saving a v-Card

To save a contact as an electronic business card, do the following:

1. Open the e-mail messaging software.
2. Select **Go > Contacts**.

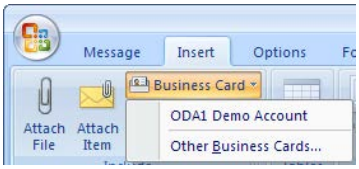
3. Double-click on a contact. Select **File > Save As…**.
4. Click **Export to vCard file**. **vCard file** dialog box appears (figure below).
5. Notice the format displayed in **Save as type:** dropdown, type a name in **File name:** and Click **Save**. Now you can send this vCard file through e-mail message as an attachment; recipient can import this vCard that has complete information (depending on how much you have filled) in their e-mail messaging software.



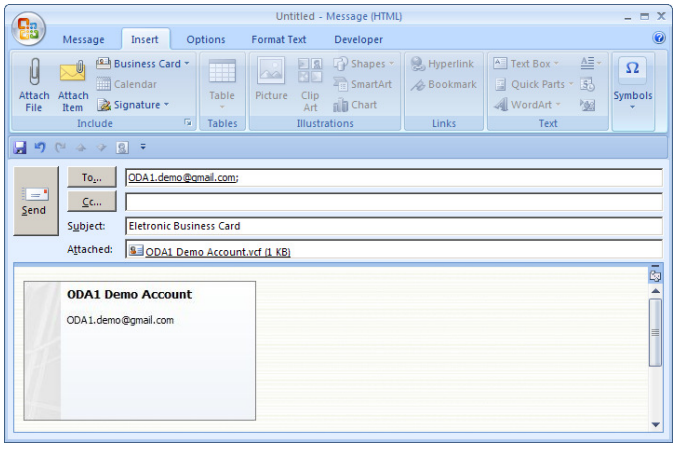


Attaching a v-Card

You can also attach a business card to an e-mail by doing the following:



1. Select **File > New > Message**.
2. Select **Insert** tab.
3. Select **Business Card** dropdown arrow (figure above); select the vCard from the list (for example, ODA1 Demo Account). To attach someone's contact details, select **Other Business Cards…**, select the contact and click **OK**.
4. Notice the vCard added as an attachment (file extension, .VCF). Now you can send this mail to a recipient.



Recipients when they open this mail can import this vCard into their e-mail messaging software by double-clicking on the attachment and by clicking **Save & Close**.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Include your first name, last name, email address and mobile number as a HTML signature.
2.	Create a vCard to include your first name, last name, email address and mobile number; configure email messaging software to include this vCard for all outgoing mails.

ASSESSMENT

Answer the following

1. Explain the procedure to include a signature in plain text format for all outgoing mails.
2. Explain the procedure to include a signature in HTML format for all outgoing mails.
3. Explain the procedure to include vCard for all outgoing messages.

Fill in the blanks

1. Signature Text option is available in _____ dialog box of Tools Menu.

SESSION 5: CONFIGURING E-MAIL SECURITY SETTINGS

Learning Objectives:
At the end of this session, you will be able to:

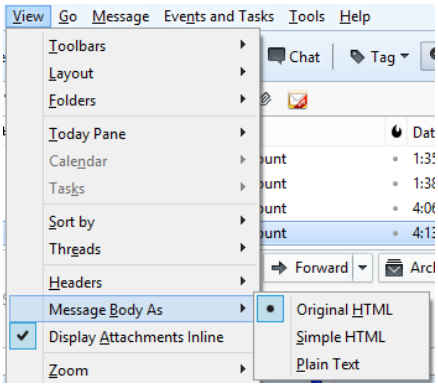
- Configure e-mail security settings.

RELEVANT KNOWLEDGE

Security refers to protecting your computer from viruses. Some e-mail messages may contain malicious code such as a spyware or virus that may harm your computer. You can modify certain settings of your e-mail messaging software to defend against attacks originating from emails.

Note: It is highly recommended to have a firewall and anti-virus installed and kept up-to-date to ensure maximum protection.

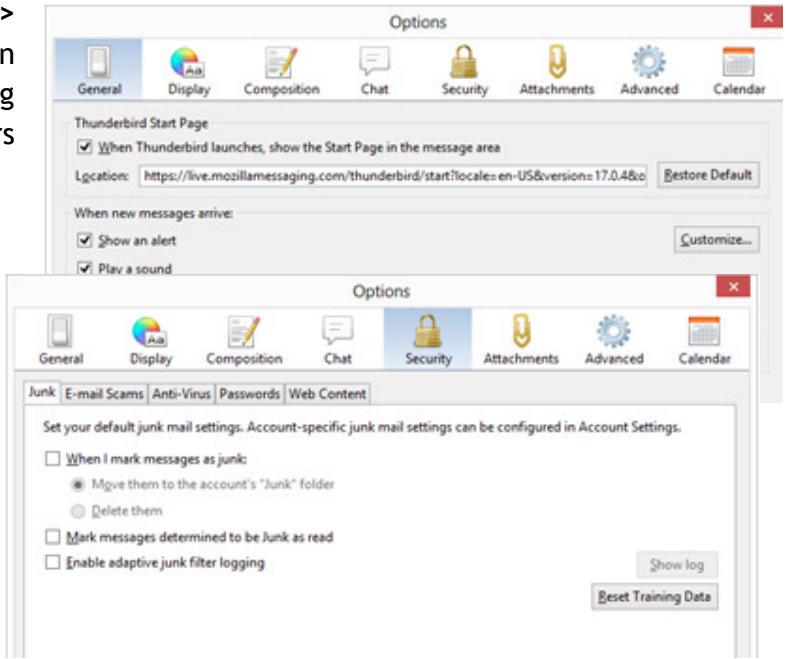
Messages are displayed in HTML format by default. This can lead to a potential security hole as malicious code embedded in HTML can harm your computer. To disable HTML formatting, do the following:



1. Select **View** menu (figure adjacent).
2. Select the menu option **Message Body As**. Notice the default setting is HTML; select **Plain Text**. Observe the emails in your **Inbox displ**ayed in plain text format.

E-mail messaging software includes mail filters that can control messages, mark them as spam and move them to a special folder called the "Junk Folder" to protect your computer.

To configure security options, do the following:

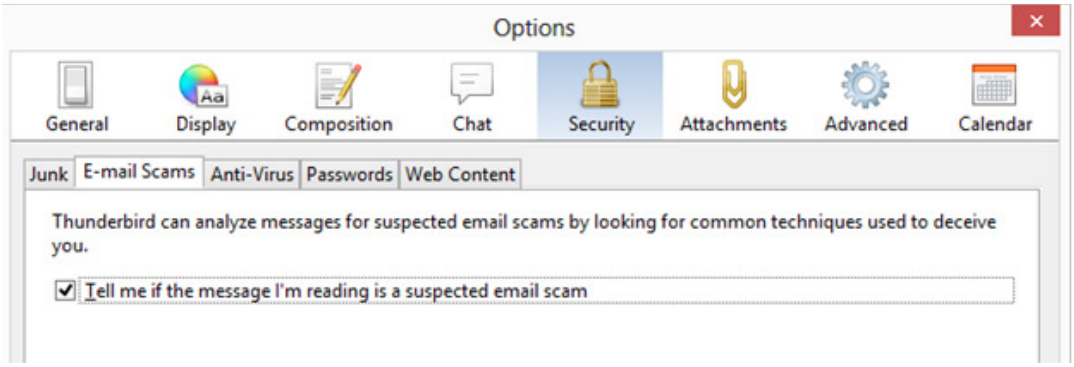


1. Select **Tools > Options**. An **Options** dialog box appears (figure adjacent).
2. Select **Security**.
   a. Select **Junk** tab. To move

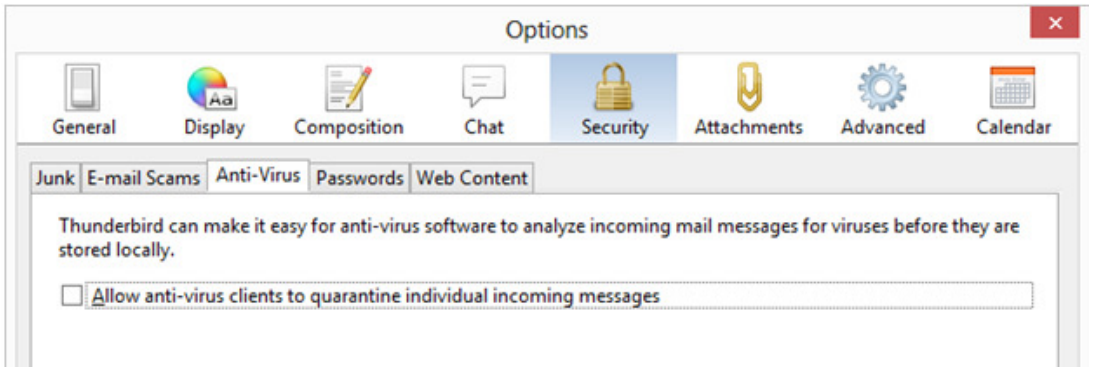
mails to the Junk folder when they are marked as Junk, check **When I mark messages as junk:** and select **Move them to the account's "Junk" folder**.

b. Select **E-mail Scams** tab.

c. Check the option **Tell me if the message I'm reading is a suspected email scam** for email messaging software to analyze and alert on finding any suspicious mails.



d. Select **Anti-Virus** tab.



e. Check the option **Allow anti-virus clients to quarantine individual incoming messages** for anti-virus software to quarantine infected email messages. Quarantine is a feature of most anti-virus software that isolates infected email messages from rest of the computer keep it safe and secure.

3. Click **OK**.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Configure the following in your email messaging software to keep your computer secure: a. Set the default view of message body to plain text.

	b. Configure to move email messages to move emails to "Junk" folder when they are marked as Junk.

ASSESSMENT

Answer the following

1. Explain the procedure to modify the default message view to plain text.
2. Explain the procedure to:
    a. Move emails to “Junk” folder when they are marked as Junk.
    b. Allow anti-virus to quarantine infected emails.

Fill in the blanks

1. Junk, e-mail scams, anti-virus tabs are available in _____ section of Options dialog box.

SESSION 6: ORGANIZING E-MAILS

Learning Objectives:
At the end of this session, you will be able to:

- Organize your e-mails by grouping them into appropriate folders.

RELEVANT KNOWLEDGE

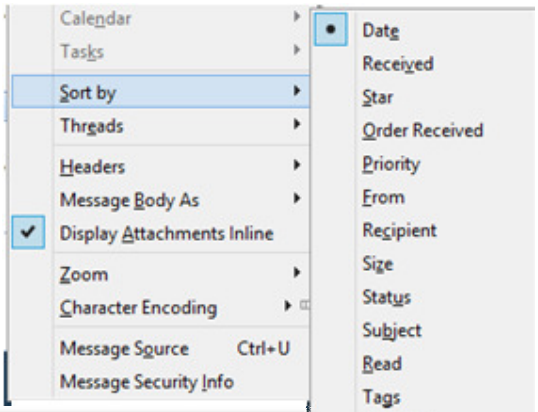
It might be difficult to deal with e-mails over time. This is especially true when you send and receive a whole lot of e-mails. You may end up losing track of them! To avoid such confusion, you can use certain features such as grouping, conditional formatting, etc. and organize e-mails.

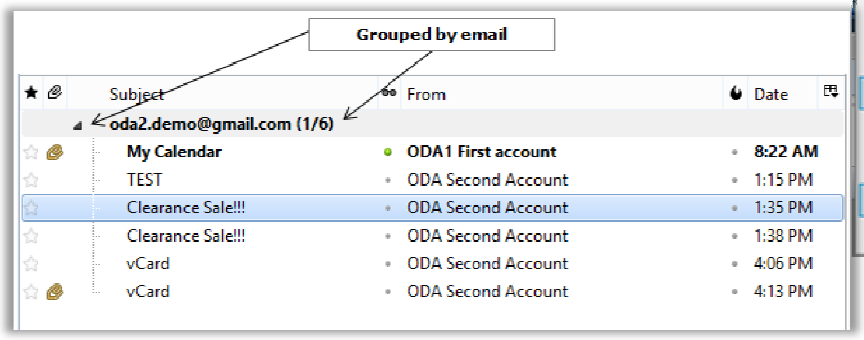
Group e-mails

Grouping helps you to keep similar e-mails together. For example, you can group all the e-mails sent to a particular recipient to track e-mails sent to that recipient thus avoiding scrolling back and forth to locate the e-mails!

To group emails by sender's email address, do the following:

1. Open your email messaging software.
2. Select **View > Sort by**.
3. Select the submenu option **Recipient**.
4. Select **View > Sort by > Grouped By Sort**.
5. Notice the emails grouped by sender's email address (figure below).





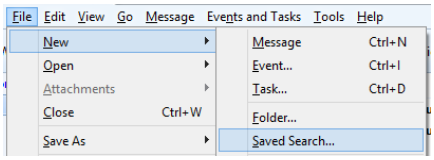
To switch to default view,

1. Select **View > Sort by>Threaded**.

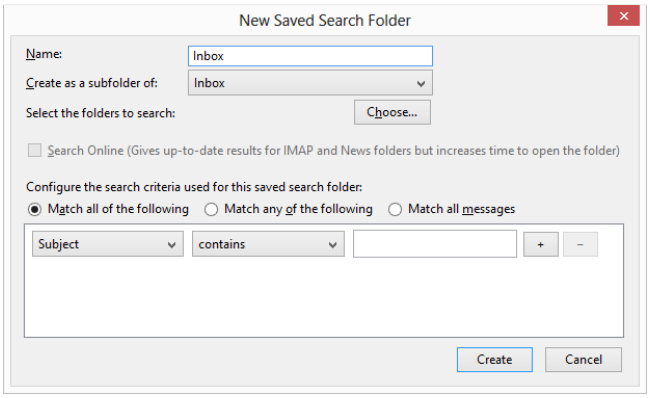
Using Saved Search Folders

Saved search folders are virtual folders that have e-mails matching certain criteria; they just point to the e-mails located in Inbox or other folders. For example you can create a saved search folder to match the criteria "exam" that will hold and point all emails matching the keyword "exam".

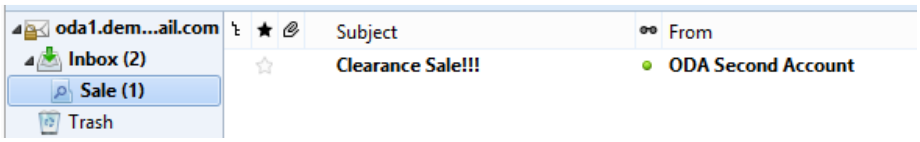
To understand search folders, do the following:



1. Select **File > New**.
2. Click **Saved Search….**A **New Saved Search Folder** dialog box appears (figure below).



   a. Type a name for this folder in the textbox **Name:**, for example **Sale**.
   b. Under the section **Configure the search criteria used for this saved search folder:**, select the option **Match any of the following**.
   c. You can use the dropdown menus for list of values under Configure the search criteria used for this saved search folder: section. For example, select **Subject** from 1st dropdown, **contains** from 2nd dropdown and type **Sale** in the text box.
   d. Click **Create**.
   e. Notice the saved search folder named Sales displaying emails matching the keyword *Sale* (figure below).



You can use a variety of combinations such as:

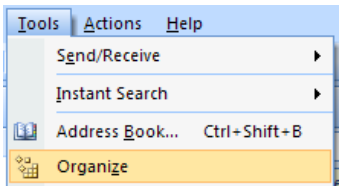
   a. Mails that have attachment(s).
   b. Mails from a particular recipient.

c. Mails sent on a particular date and so on.

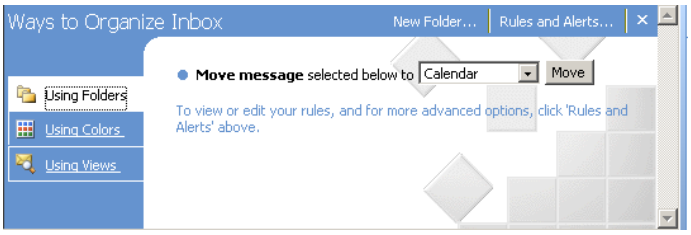
Experiment with different dropdown values to learn more.

Conditional Formatting – MS Outlook

Microsoft Outlook provides a facility to highlight and organize messages through a special feature called "Conditional Formatting". This helps in attracting attention to specific mails. To apply a particular font and colour for mails from specific person, do the following:



1. Select **Tools > Organize**.
2. A new **Ways to Organize Inbox** window will appear below the standard toolbar (figure adjacent - below).



3. Select **Using Colors**, you should see a window similar to the one adjacent - below.
4. Specify the e-mail address of the recipient and choose a color.
5. Click **Apply Color**. Click The X command button to close.
6. Now when you receive a mail from selected contact, you should the mail color coded in Inbox.



Now try changing font, color, etc. by using the **Automatic Formatting** option next to **X** command button.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Group all the mails by email addresses of your classmates.
2.	Create a saved search folder to display all the emails from one of your classmate.

ASSESSMENT

Answer the following

1. Explain the procedure to group emails by:
    a. Size
    b. Order Received
    c. Read
2. Explain the purpose of saved search folders with an example.

Fill in the blanks

1. Grouped by Sort is available in _____ submenu of _____ menu.

2. Saved Search option is available in _____ submenu of _____ menu.

SESSION 7: MANAGING DATA FILES (BACKUP)

Learning Objectives:
At the end of this session, you will be able to:

- Manage data files.

RELEVANT KNOWLEDGE

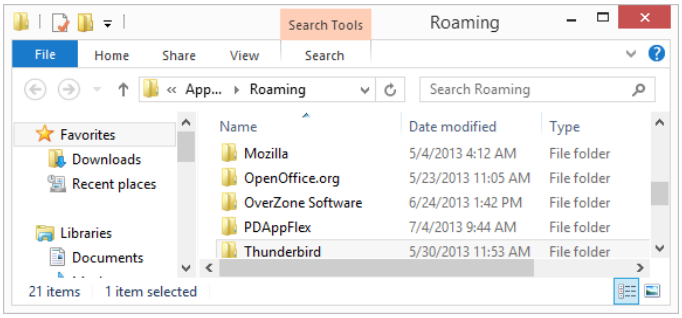
As you know, it is always recommended to keep backup copies of e-mails in the event of a failure.

Data files refer to e-mail messages, address books and configuration settings that are stored in a folder called "Profile". The first time you start your email messaging software, a profile is automatically created and used.

Note: Profile is ***NOT*** deleted when you uninstall email messaging software.

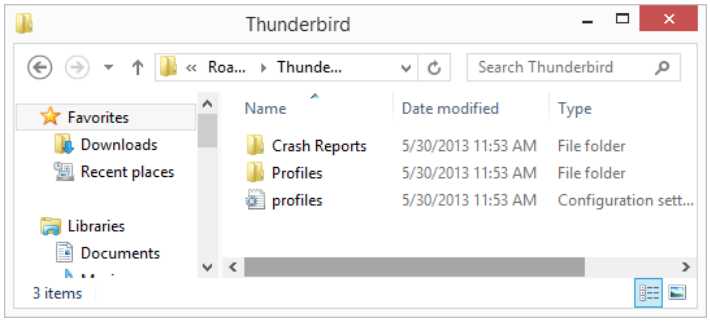
To view a profile, do the following:

1. Click **Start > Run**.
2. Type **%APPDATA%** and press **Enter**. A window similar to the one adjacent appears.
3. Scroll and select the folder **Thunderbird** (All settings and date are stored in this folder). Copy this folder for backup.



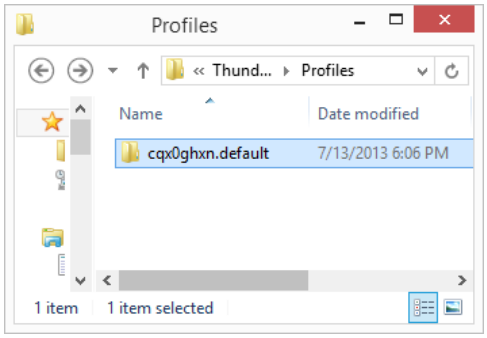
Additional Information

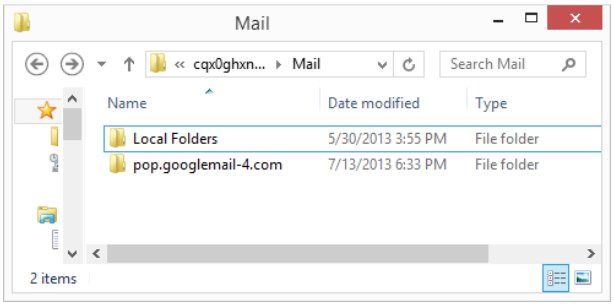
1. Double-click Thunderbird folder, contents of Thunderbird folder appear (figure adjacent).



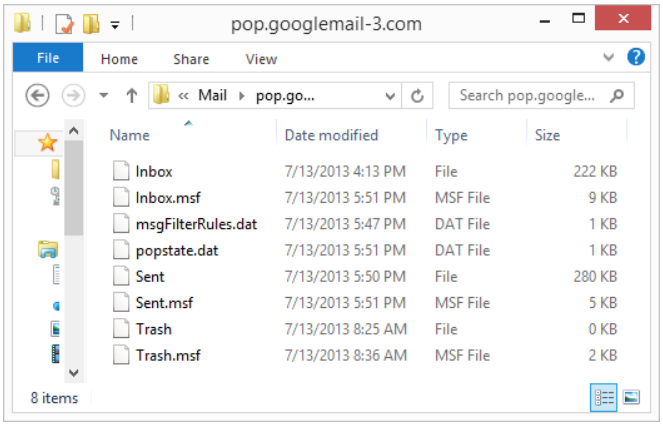
Note: Thunderbird uses Profiles.ini to locate the data folder.

2. Double-click **profiles** folder. A folder similar to the one adjacent appears.
3. Double-click this folder. Notice the contents of this folder (figure below).





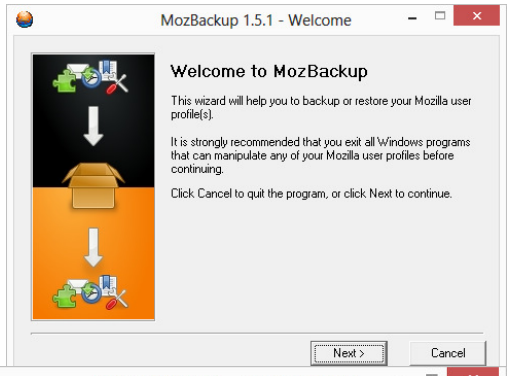
4. In this case, everything is stored in **pop.googlemail-4.com** *(this may vary on each computer)* folder. To view the contents, double-click the folder. Notice the contents of this folder (figure adjacent).

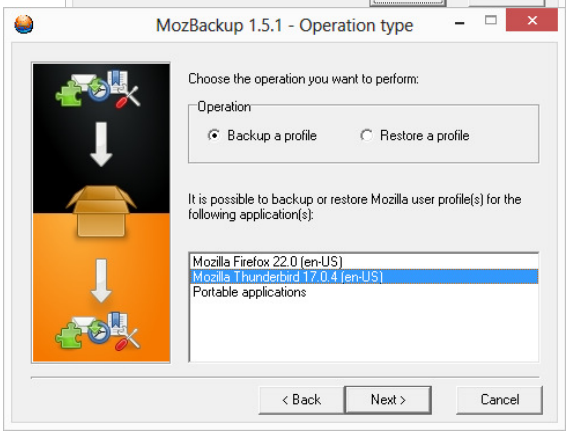


MozBackup

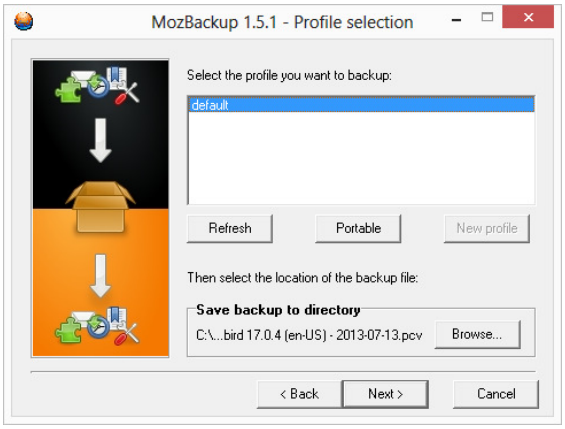
MozBackup is a free utility that you can use to backup Mozilla Firefox and Thunderbird.

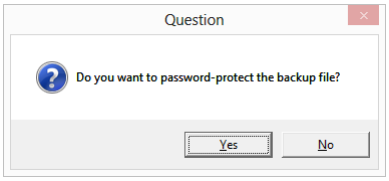
1. Go to http://mozbackup.jasnapaka.com.
2. Download MozBackup and install it on your computer.
3. Click **Start > Programs >MozBackup**. A **Welcome to MozBackup** wizard appears (figure above).
4. Click **Next**. A window similar to the one adjacent appears.

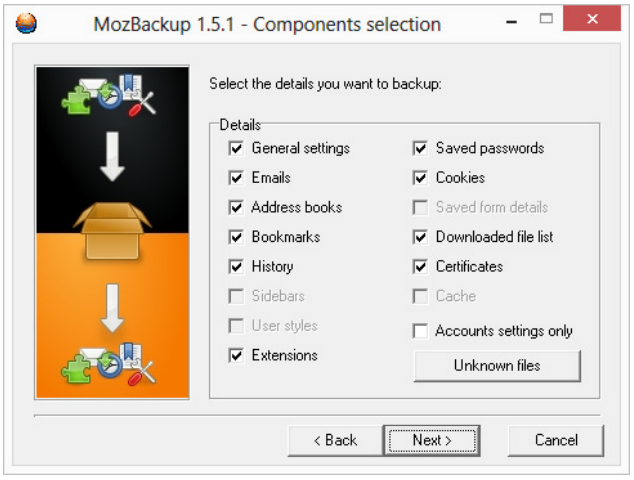




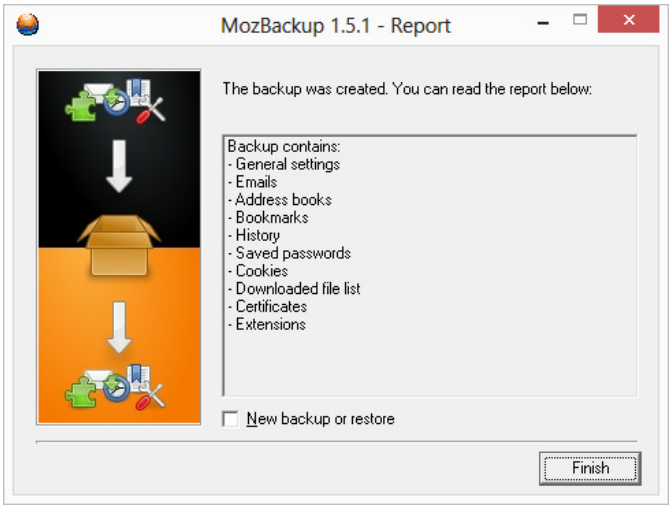
5. Select **Mozilla Thunderbird**, click **Next**. A window similar to the one adjacent appears.
6. Click **Browse…** to select another folder on your computer, for example: **D:\Thunderbird** and click **Save**.
7. Click **Next**. **Question** popup appears as shown below (left).

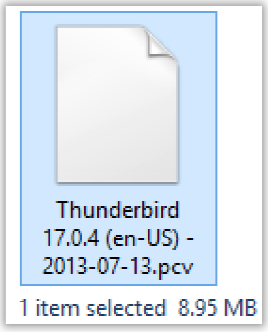






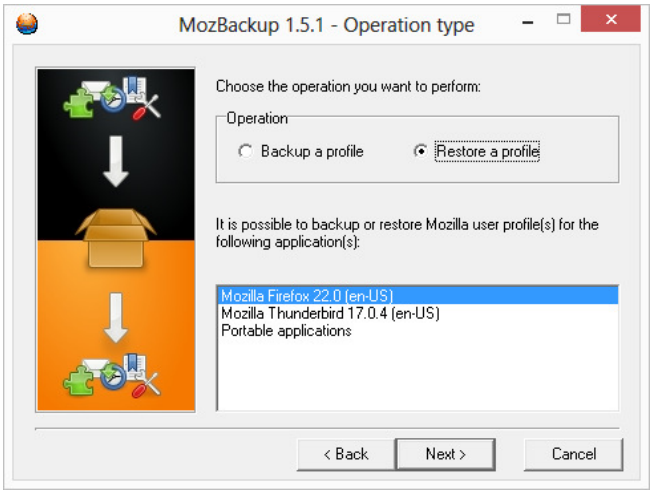
8. Click **No**. (Password protection is optional). A window similar to the one above (right) appears.
9. Click **Next**. A window similar to the one below (left) appears.

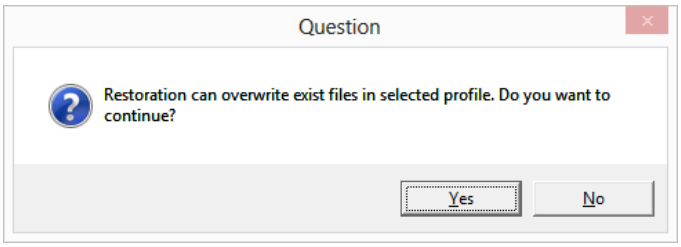




10. Click **Finish**. Notice a single file saved in the backup location with the file extension .PCV (figure above right).

To restore, do the following:





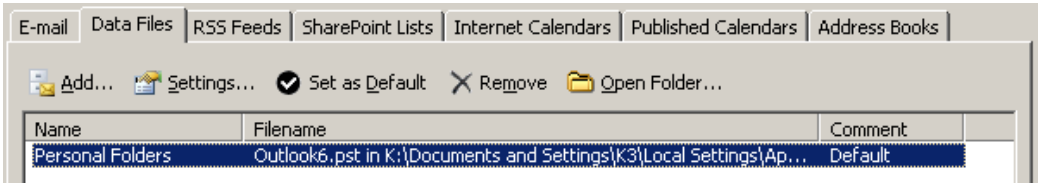
1. Click **Start > Programs >MozBackup. Welcome to MozBackup** wizard appears.
2. Click **Next.** A window similar to the one adjacent appears.
3. Select **Restore a profile** and **Mozilla Thunderbird** and then click **Next**.
4. Click **Browse** to select the backup file, click **Open**.
5. Click **Next** Twice. A popup appears similar to the one adjacent.
6. Click **Yes**.
7. Click **Finish**.

MS Outlook 2007

Backup Items

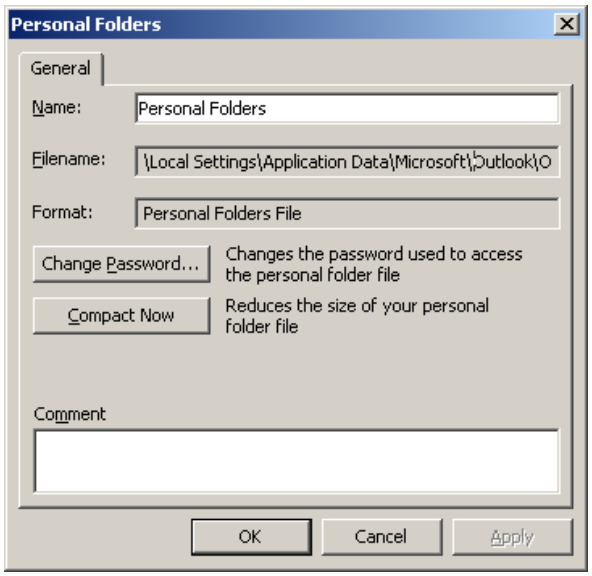
e-mail messaging software stores all your e-mails, contacts, calendar items, etc. in a single file called the ***Personal Folder File*** or ***PST***. PST is automatically created and managed by the e-mail messaging software. To view the location of this file, do the following:

1. Open the e-mail messaging software.
2. Select **Tools >Account Settings,** click **Data Files** tab. Notice the file location under **Filename** section (figure below).



3. To view complete path, click **Settings…** (figure above).

4. A **Personal Folders** popup appears (figure adjacent).
5. Notice the complete path in **Filename:**. By default, PST's are stored in hidden folder under **Local Settings** in *C:\Documents and Settings\USERNAME*.
6. Use Windows Explorer to view hidden files, locate the PST and create a copy of it (select ***FILENAME.PST***, copy and paste elsewhere). Also note that the e-mail messaging software ***MUST*** be closed or you won't be able to make copies of it.



Note: In Windows Vista / 7, PST is stored in *C:\USERS\USERNAME*.

Using PST Backup Tool

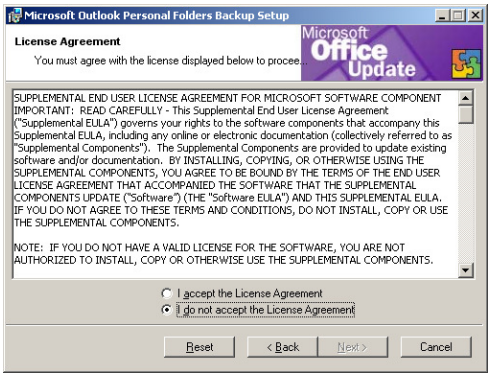
The above mentioned procedure may be difficult as it involves too many steps. As an alternate, you may download the **PST BACKUP Tool** from Microsoft's website and take the backup. Download the tool from the following URL:

- http://www.microsoft.com/en-us/download/details.aspx?id=9003

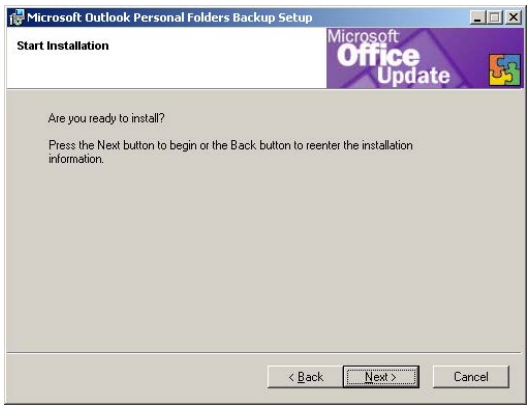
To install this tool, do the following:

1. Double-click **pfbackup.exe**. A window appears similar to the one below (left).



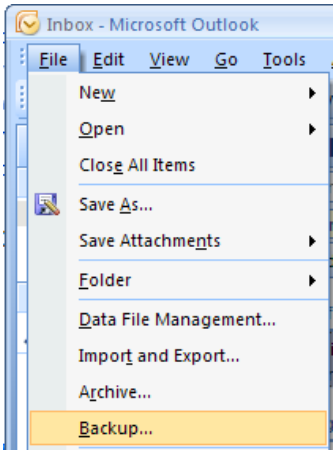


2. Click **Next**. A **License Agreement** appears (above - right).
3. Accept the terms and click **Next**. A **Start Installation** window appears.
4. Click **Next**, click **Finish**.



To launch the tool, do the following:

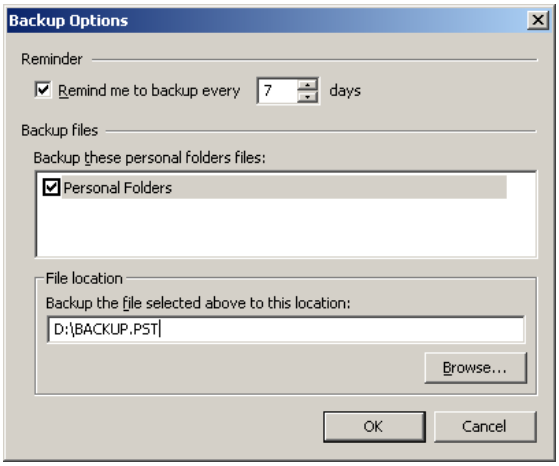
1. Open the e-mail messaging software, Select **File** menu (figure below).



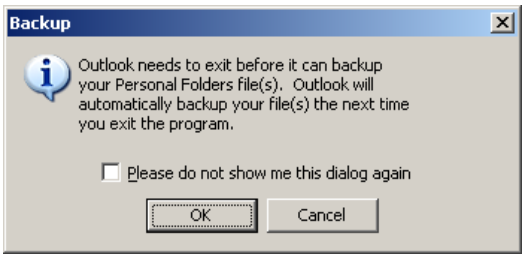
2. Notice the new entry **Backup…**. Click **Backup…**, An **Outlook Personal Folders Backup** popup appears (figure below).



3. Click **Options…** button (figure above), A **Backup Options** popup appears (figure below).
   a. Specify the reminder value (for example to remind you every 10 days, specify 10 in **Remind me to backup every __ days**).
   b. Specify the location where you want to keep the backup; choose a location that is not the same where operating system resides. Choose another partition, a network folder or pen drive. Click OK.

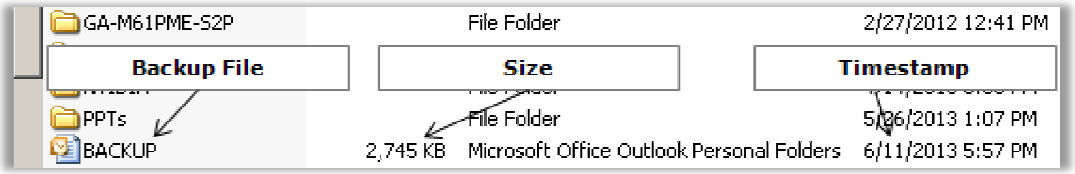


4. Click **Save Backup**. **Backup** popup appears (figure adjacent) indicating the e-mail messaging program should be closed.
5. Click **OK**. Close e-mail messaging software; a backup will be created in the location specified



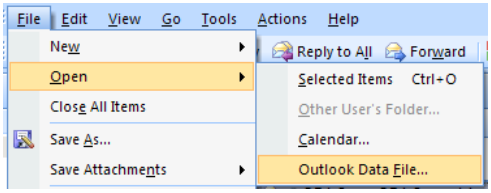
earlier.

6. To view the file, navigate to the location using Windows Explorer. Notice the backup file (figure below).

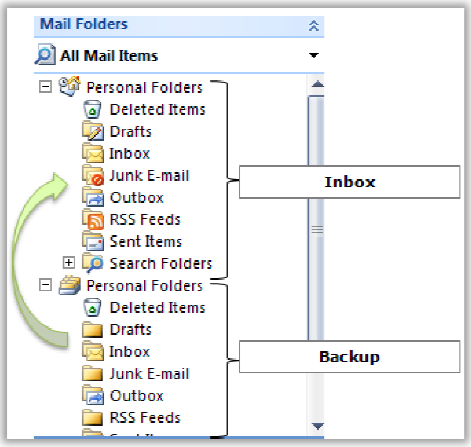


Restoring from a backup

If you want to restore e-mails from the backup (on the same computer or a different computer), do the following:



1. Select **File > Open >Outlook Data File** (figure adjacent).
2. Browse and select the BACKUP.PST. Backup data file will be displayed below the default folder (figure below).
3. To restore, select mail(s) from Backup, drag and drop it in Inbox.



Add data files to a mail profile

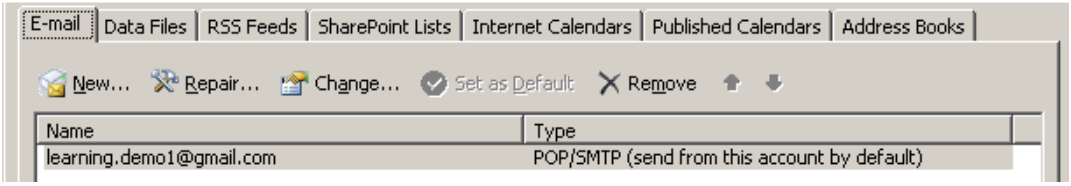
You can configure multiple e-mail accounts in e-mail messaging software which you may need if you have multiple e-mail accounts with different providers (such as outlook.com, gmail.com, yahoo.com, etc.). You can configure all the accounts in a single e-mail messaging software thus saving time and efforts to check every account manually.

You can either:

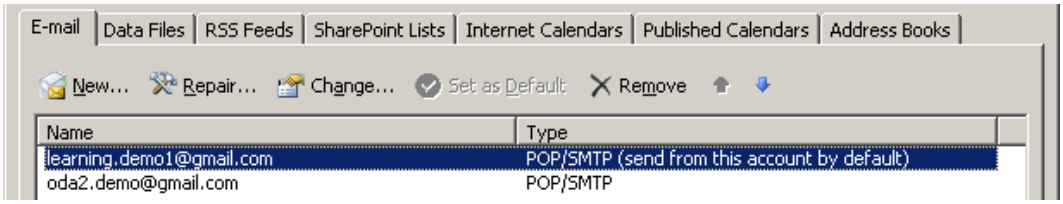
a. Add multiple accounts to a single profile (useful when you want to configure multiple user accounts in a single shot!)
b. Add each account to a separate profile (useful when you want to keep personal and business E-mail accounts separate from each other for convenience).

To use another e-mail account using a single profile, do the following:

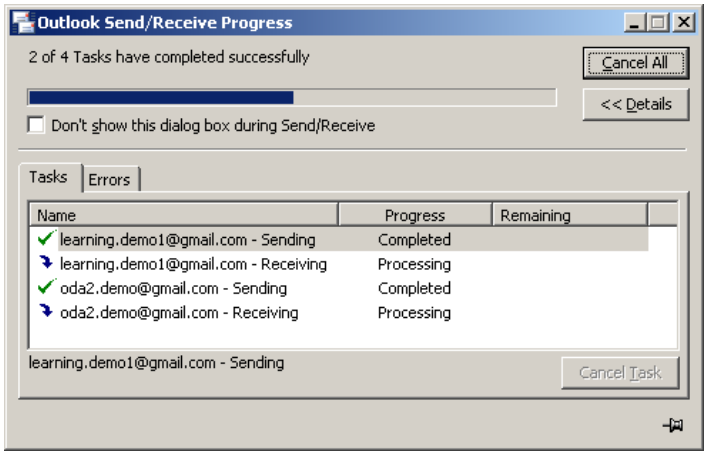
1. Open the e-mail messaging software (as normally you would).
2. Select **Tools > Account Settings**.



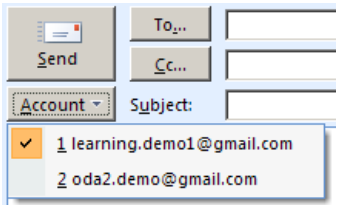
3. Notice the existing mail account is displayed. To add another account, click **New…**, follow the onscreen instructions to complete the steps. Notice both the e-mail accounts are displayed (figure below).



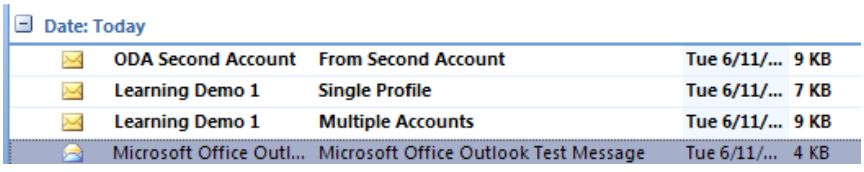
4. When you hit **F5** (send/receive), e-mail messaging software will check for both the accounts (figure below).
5. When you send e-mails, you need to specify which e-mail account you are sending from as it will use the default (first) e-mail account for all messages composed. To specify the e-mail account while composing the message, do the following:



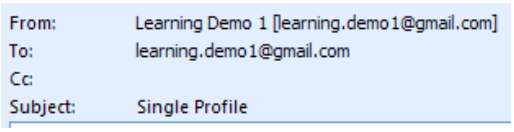
   a. Select **File > New > Mail Message** (figure adjacent).



   b. Notice the **Account** dropdown below the **Send** button. Select the account from which you need to send this mail from, for example choose the second one in the list.
   c. Compose the mail and send it to a recipient.
6. When you receive e-mails, mails from both the account are displayed together in the Inbox (figure below).



7. However when you open each mail, you may be able to differentiate between the two accounts (figure adjacent).
8. Notice the e-mail address in **From:**.



Delete a profile

To remove a profile, go to **Control Panel > Mail**. Select the profile you want to delete, click **Remove**.

Important: When you remove a profile, only the settings are removed. Data files still remain in respective folder and are NOT deleted. Use Windows Explorer to recover data files (.pst) using the procedure outlined in this session.

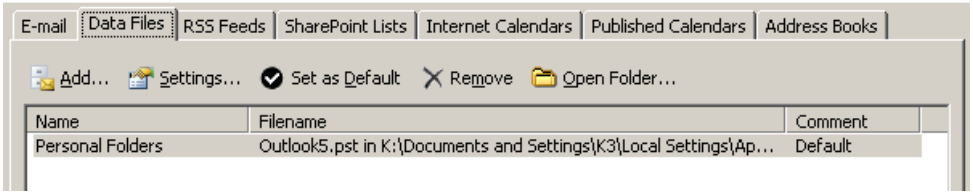
Change data file settings

You can change the data file for an existing account or specify a data file for each e-mail account.

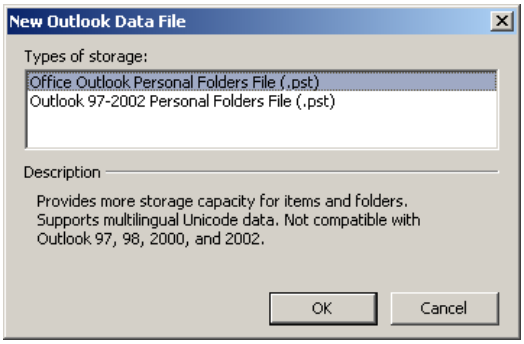
For example, if you have used e-mail messaging software for a very long time and have a lot of mails, you can create a new data file for the new mails (from now on). You can also create a new data file for each month or year!

To create a new data file, do the following:

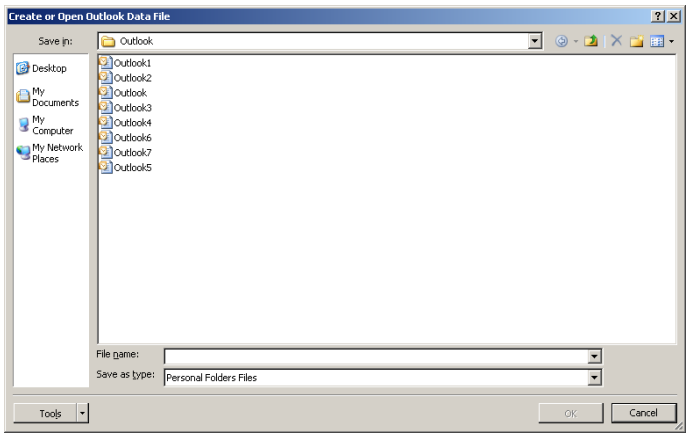
1. Open the e-mail messaging software.
2. Select **Tools > Account Settings**, Select **Data Files** tab.



3. Click **Add…** to add a new data file, A **New Outlook Data File** dialog box appears as shown below.
4. Select **Office Outlook Personal Folders File (.pst)**, click **OK**.



5. **Create or Open Outlook Data File** dialog box appears (figure adjacent), select the location where you want to store this data file and type a name for this data file. For example, **Y2013** and then click **OK**.

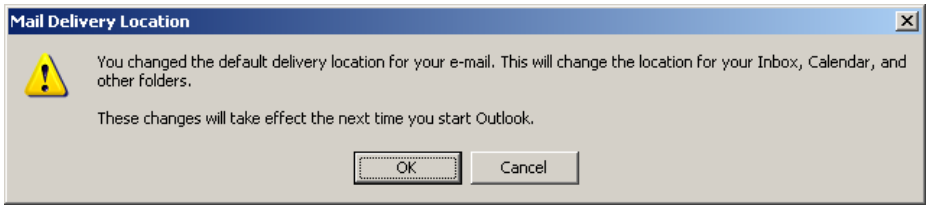


6. **Create Microsoft Personal Folders** popup appears as shown below.

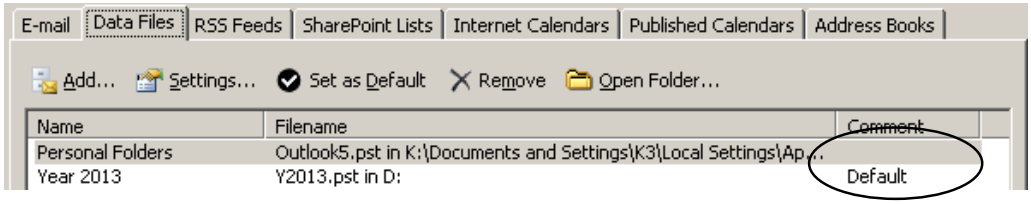


7. Type a name in **Name:** and click **OK**. Notice the second data file created and displayed (figure adjacent).

8. You need to configure the e-mail messaging software to deliver new messages to this new personal data file instead of the old one; to configure, select the second data file and click **Set as Default** (refer figure above). A **Mail Delivery Location** popup appears as shown below.

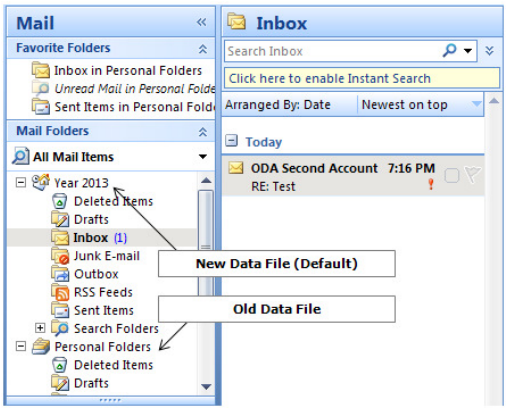


9. Click **OK**. Notice the default data file changed to the new data file (figure below).



10. Click **Close**.
11. Now exit and re-open the e-mail messaging software.

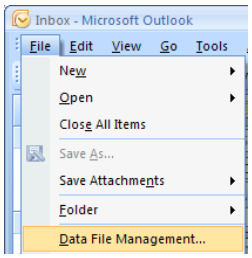
12. Notice the new mails are stored in the new data file.



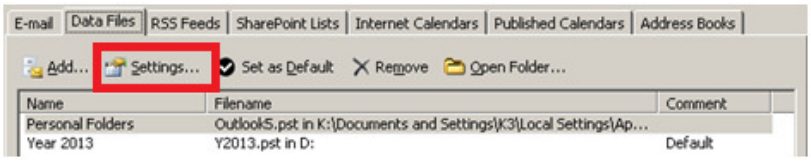
Note: Older e-mails will be available in the old data file and only new items are stored in new data file.

Managing Size

Personal Data File (PST) can get quite large after substantial usage (too many e-mails everyday and/or used for a very long period). In general, PST's are automatically optimized in the background. To manually optimize, do the following:



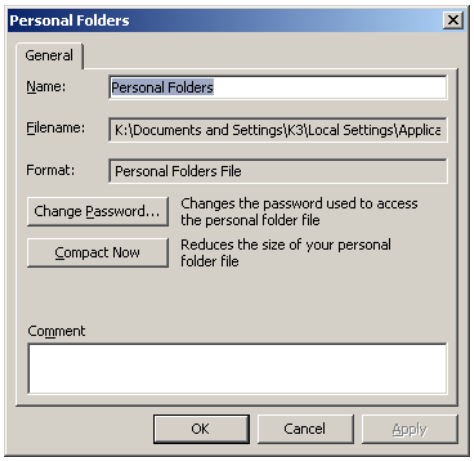
1. Select **File** menu.
2. Click **Data File Management….**



3. Select the data file you want to optimize, for example **Personal Folders**. Click **Settings….** A **Personal Folders** dialog box appears (figure adjacent).
4. Click **Compact Now**.

   Note: Compacting takes time depending on the size of the data file.

5. Click **OK** and then click **Close**.



EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Take a backup of your email messaging software (including data) using both manually and MozBackup.

ASSESSMENT

Answer the following

1. List any three scenarios where you need to perform a backup. (Answer: Moving data to another computer, formatting and re-installing OS, general backup for protection).
2. Explain the procedure to backup profile folder (Mozilla Thunderbird).

Fill in the blanks

1. Profile (Mozilla Thunderbird) is stored in _____ Folder.

SESSION 8: CUSTOMIZING THE MS OUTLOOK TO DO BAR

Learning Objectives:

At the end of this session, you will be able to:

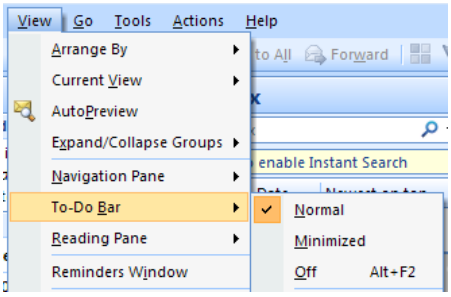
- Customize the To-Do bar.

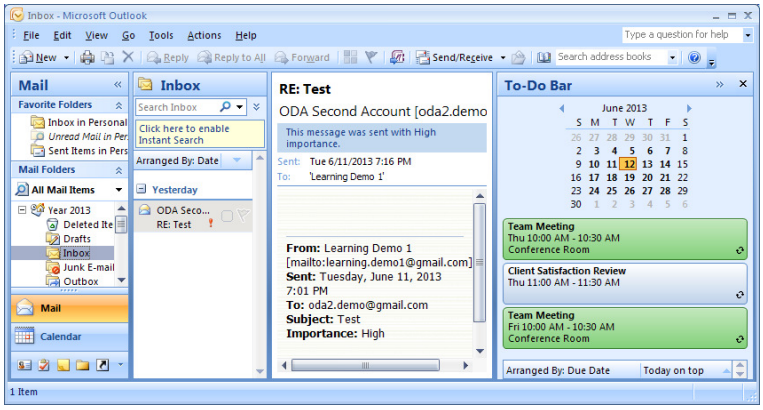
RELEVANT KNOWLEDGE

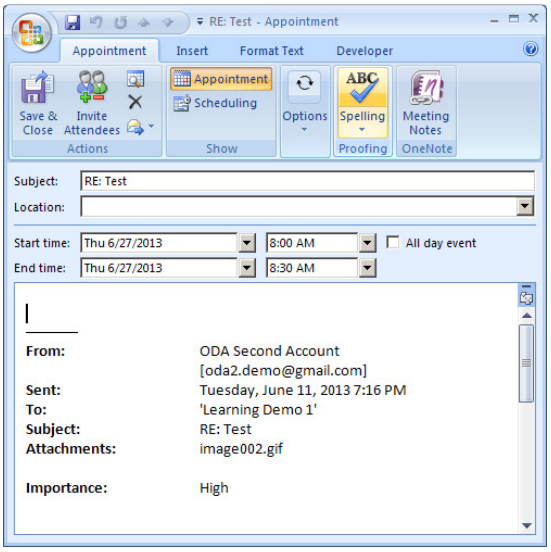
In earlier sessions, you learnt about tasks and tasks requests. Tasks and tasks requests appear in To-Do bar in Microsoft Outlook. By default, the To Do Bar is displayed on the right side of the e-mail messaging/ calendar software window. You can configure the To-Do Bar to manage your time effectively.

When you work with e-mails, it is possible that you may forget to reply to some mail or do a particular task. To prevent such errors, you can add the activity as a task in your calendar to serve as a reminder for completing the activity. You can drag and drop e-mails to the To-Do bar or Calendar to add it as a part of your activity. To understand this, do the following:

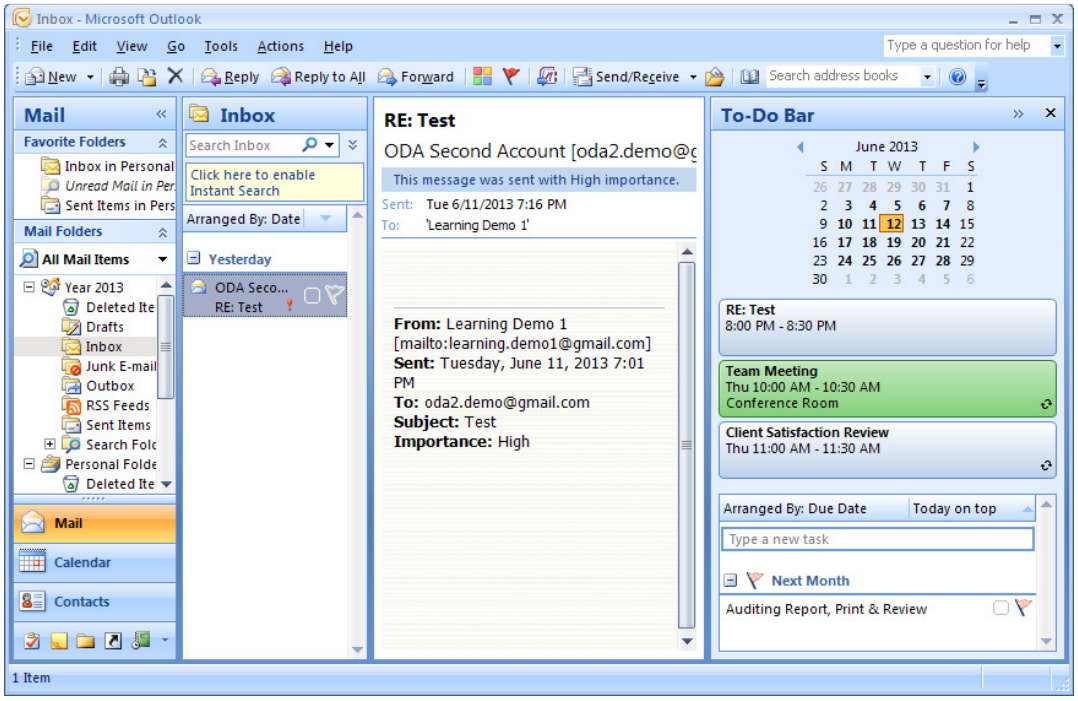
1. Open your e-mail messaging software.
2. Select **View > To-Do Bar > Normal** (figure adjacent).
3. Notice the **To-Do bar** displayed on the right- most pane on the screen (figure below).
4. Select, drag and drop the mail for which you want to set a reminder, on a date in the calendar. The **Appointment** dialog box appears (figure below).





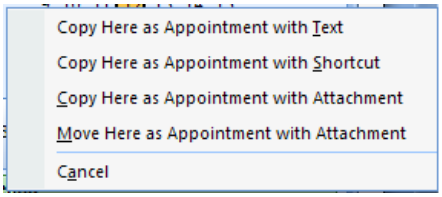


5. Set up the schedule as you would do for a normal appointment, Click **Save & Close** when done. Now this entry will be added and displayed in the **To-Do Bar** (figure below).

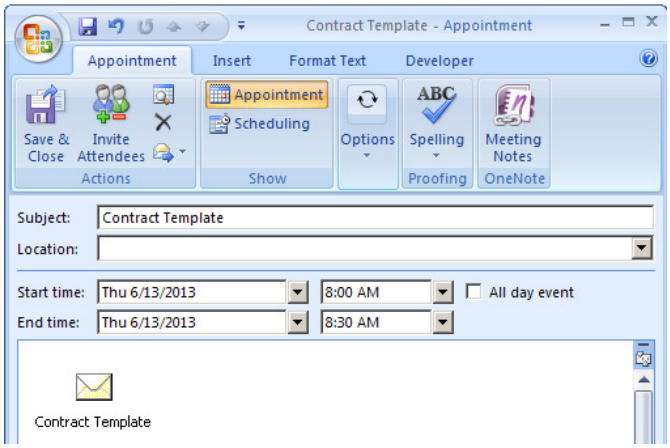


Using this method only the Subject of the e-mail is displayed in the To Do bar. You may want to view the relevant e-mail and/or attachment along with the appointment in a calendar (to relate easily). To attach the e-mail and/or attachment, do the following:

1. Right-click the e-mail. Hold, drag and drop it on a date on the calendar. A popup menu appears (figure adjacent).



2. Select **Copy Here as Appointment with Attachment**, a window similar to the one adjacent appears.
3. Notice the mail itself is attached; double-click on the mail and notice the attachment included. Click **Save & Close**.

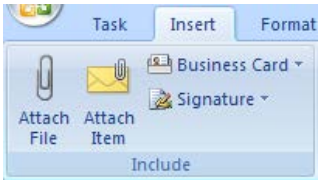


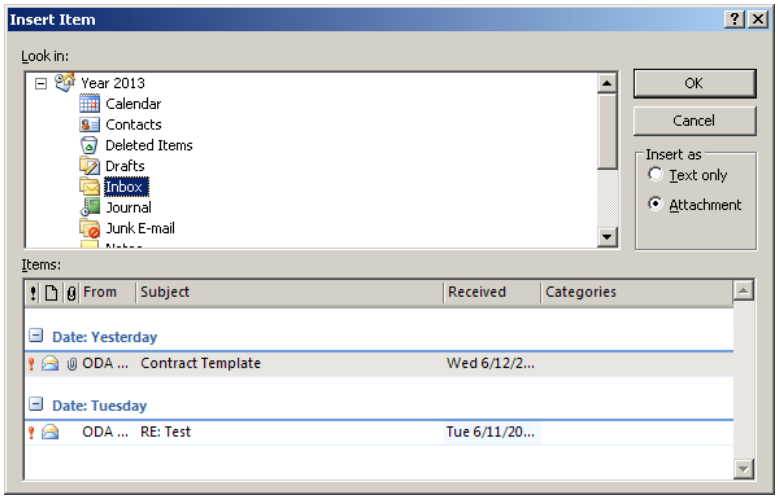
4. Notice this appointment displayed in the **To-Do Bar**.

Adding Documents to Tasks or Appointments

You can also add attachments or e-mails to new or existing tasks or appointments.

1. Create a new task or appointment, or open an existing task or appointment.
2. Select **Insert** tab.
3. To attach documents, select **Attach File** in **Include** group. An **Insert File** dialog box appears. Browse, select the document and click **Insert**.
4. To attach e-mails, select **Attach Item** in **Include** group. Select the e-mail from Inbox and click **OK**.

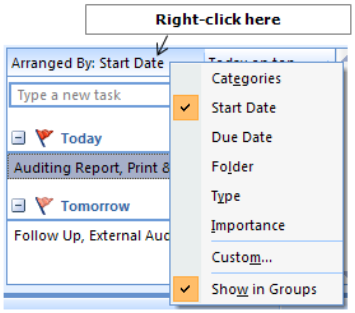




Note: You can also add items from calendar, Contacts, Journal, etc.

Now try adding other items to a task or an appointment such as a calendar item, contact, etc.

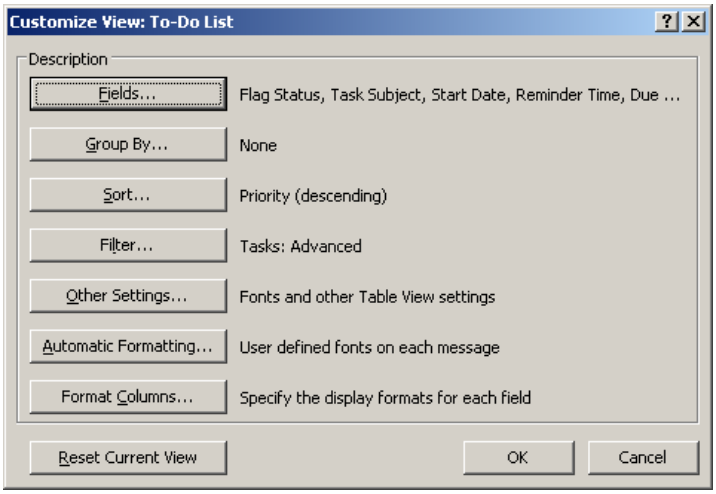
Customizing To-Do Bar



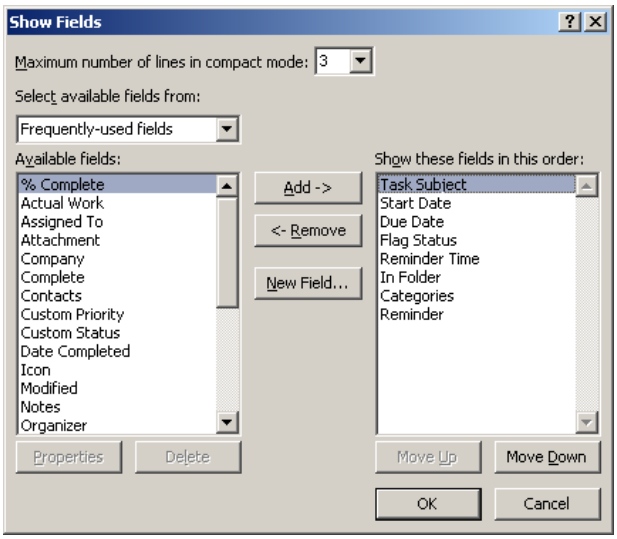
By default To-Do bar displays items in groups and only certain items such as Task Subject, Due Date, etc. are displayed when available. Also notice that items are arranged by **Start Date** (figure adjacent).

To sort by **Importance**, select **Importance** from this context menu.

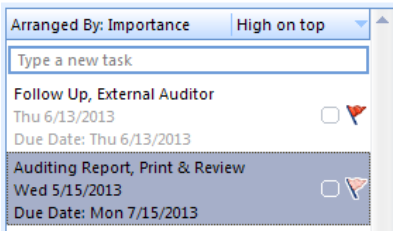
Notice - only the Subject line is displayed here. To display other fields also, do the following:



1. Select **Custom…** (figure adjacent). A **Customize View: To-Do List** dialog box appears (figure below).
   Click **Fields…** button. A **Show Fields** dialog box appears.



   a. Select the fields in the order you want from **Available fields:** list. These are displayed under **Show these fields in this order:**. For example if you want to view Task Subject, Start Date and Due Date, arrange the fields (use **Move Up** and **Move Down** buttons) as shown adjacent.
   b. Select **3** from **Maximum number of lines in compact mode:** dropdown list.
   c. Click **OK**. Observe the results displayed (figure below).



Now try adding other fields, change the order and observe the results.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Customize the To Do bar to be displayed; create tasks by dragging and dropping emails to the to-do bar using the procedure outlined in this session.

ASSESSMENT

Answer the following

1. Explain the procedure to customize the To Do bar.

SESSION 9: CREATING A FOLDER HOME PAGE USING MS OUTLOOK

Learning Objectives:
At the end of this session, you will be able to:

- Create a folder home page.

RELEVANT KNOWLEDGE

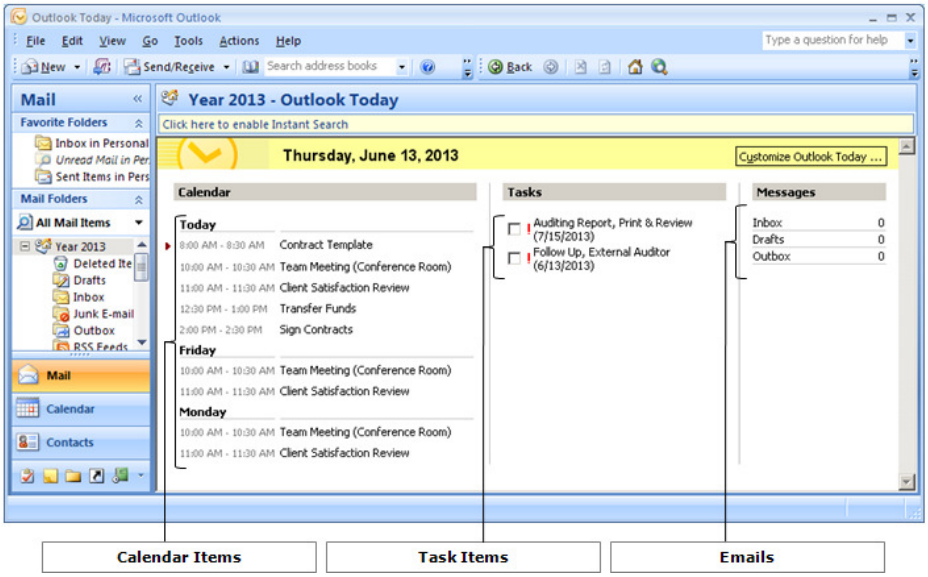
Email messaging software provides an option to customize folder using an ActiveX control called the **Outlook View Control**. This can be useful when you want specific folder and/or calendar items to appear as your home page.

To understand this concept, do the following:

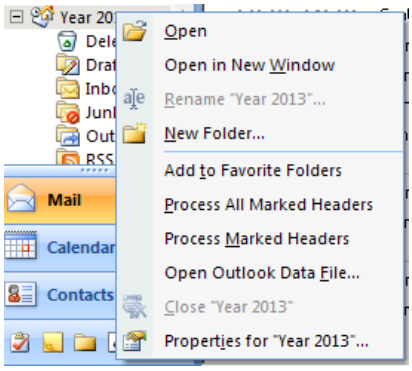
1. Open a text editor such as Notepad and type the following:

```
<html>
<head>
</head>
<body>
<OBJECT classid=CLSID:0006F063-0000-0000-C000-000000000046
        id=ViewCtlFolder
        width="100%"
        height="430">
<param name="Namespace" value="MAPI">
<param name="Folder" value="Tasks">
<param name="View" value="By Category">
<param name="Restriction" value="">
<param name="DeferUpdate" value="0">
</OBJECT>
</body>
</html>
```

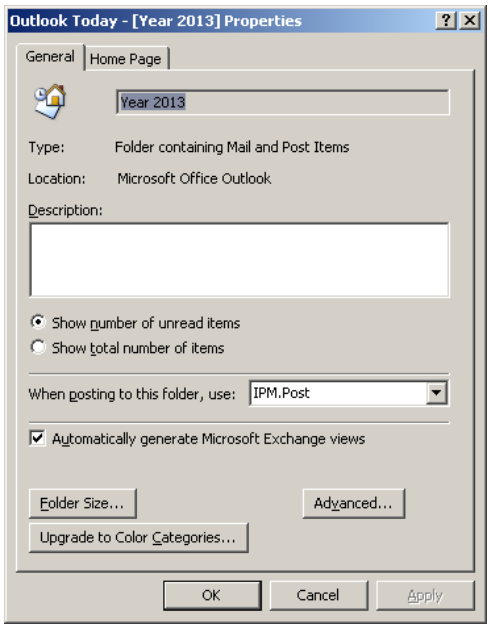
2. Save this as an HTM file, for example: "**CustomView.htm**".
3. Click **Start > Programs > Microsoft Office > Microsoft Outlook 2007**.

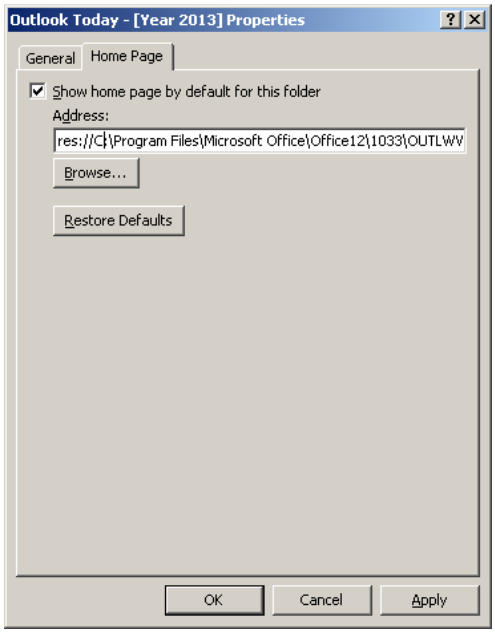


4. Observe the items from Calendar, Tasks and emails displayed in the home page (figure above). To customize this view, right-click the **Personal Folder** (for example, Year 2013 in the image above). A popup appears similar to the one adjacent.



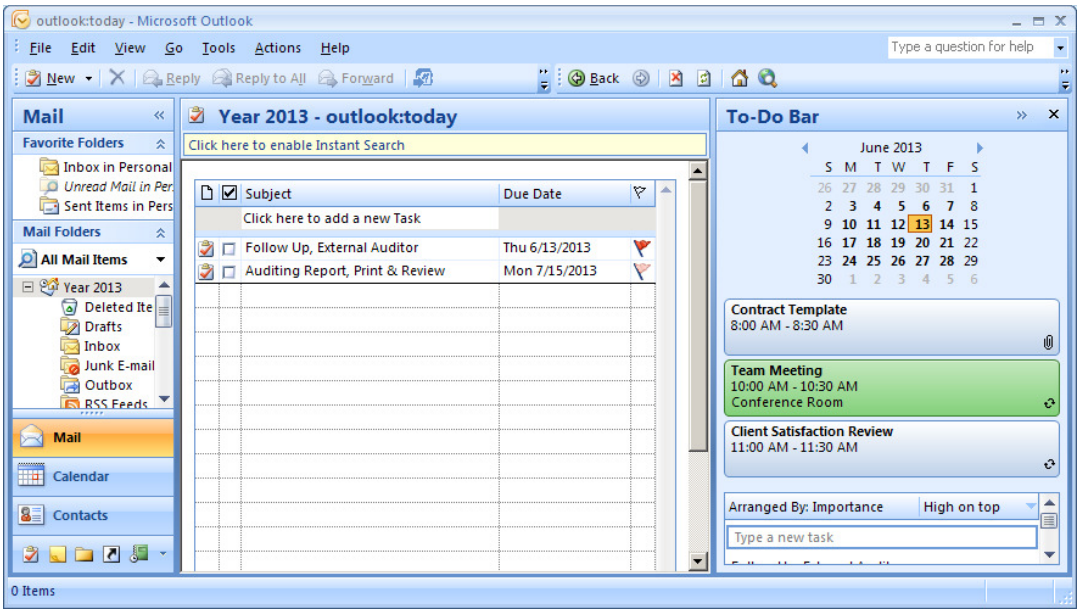
5. Select **Properties for "Year 2013"**. **Outlook Today - [Year 2013]** dialog box appears (figure below, left).





6. Select **Home Page** tab (figure above - right).

7. Click **Browse** and select the .HTM file (for example, CustomView.htm), click **Open**. Click **OK**. Observe the results (figure below) displaying items from **Tasks** alone.

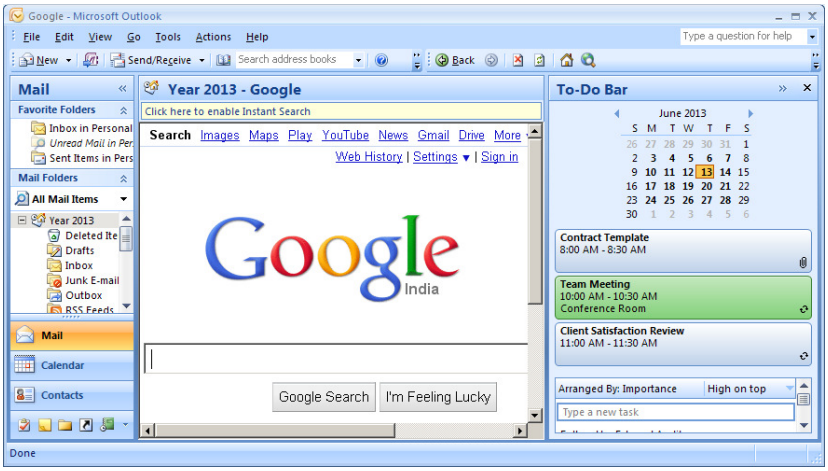


Refer to the following website for additional information:

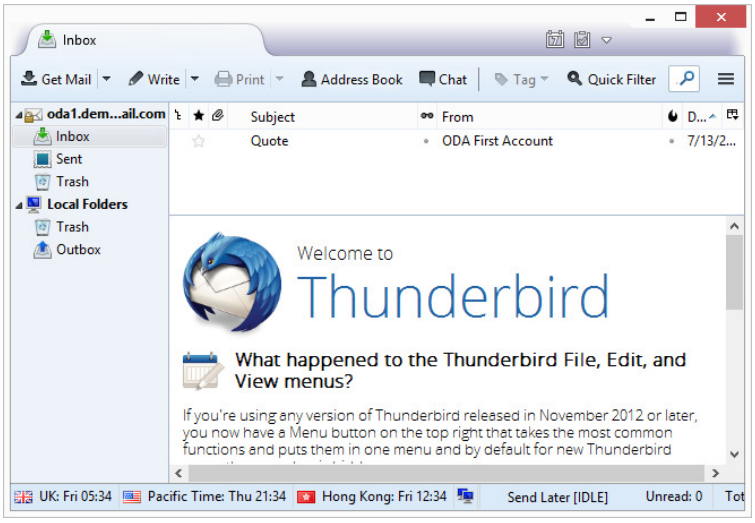
- http://support.microsoft.com/default.aspx?scid=KB;en-us;q291407

You may also specify a webpage or URL from the Internet or Intranet, or even a web page from the local hard disk drive.

1. Right-click the **Personal Folder** (for example, Year 2013)
2. Select **Properties** for "Year 2013". **Outlook Today - [Year 2013]** dialog box appears.
3. Select **Home Page** tab.
4. For example, type **http://www.google.com**, Click **Apply** and **OK**.
5. Observe the results (figure below).

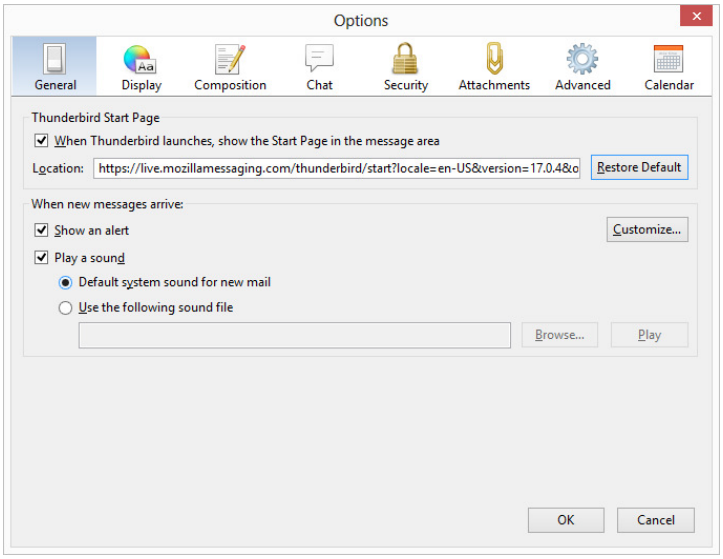


Mozilla Thunderbird

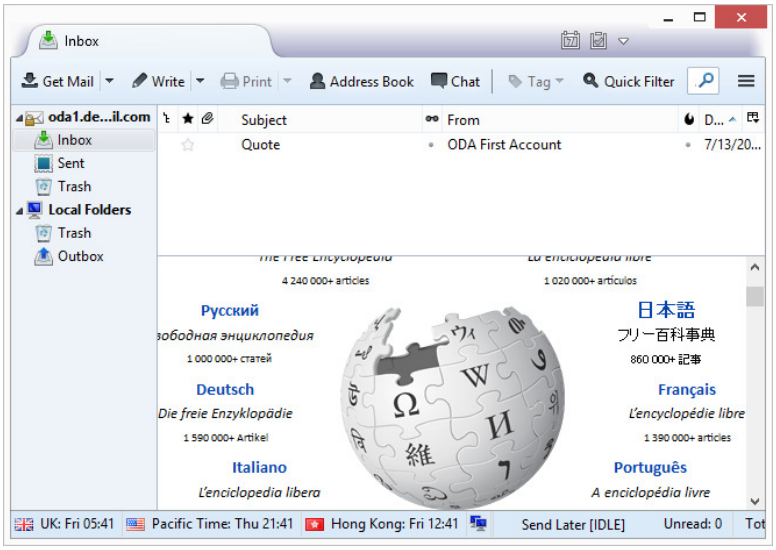


Mozilla Thunderbird displays a home page in the preview area similar to the one adjacent by default.

Instead of displaying default page, you may customize it to show a web page similar to outlook (For example, Google Home Page). For example, to show wikipedia's home page, do the following:



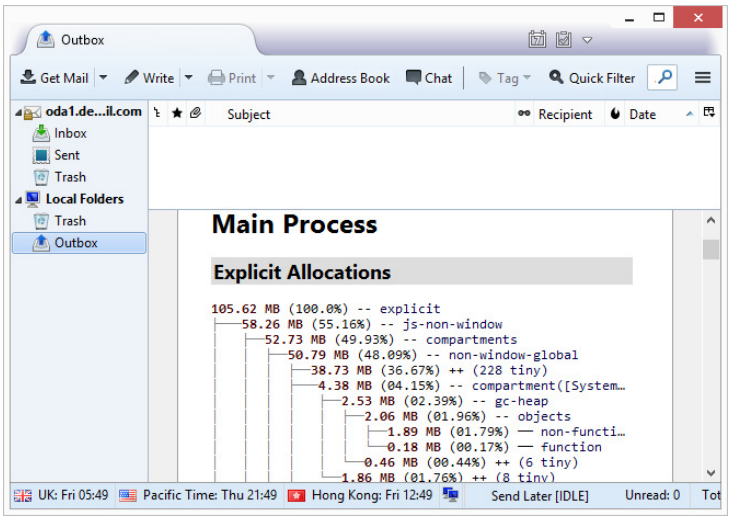
1. Select **Tools > Options**. **Options** dialog box appears (figure adjacent).
2. You can include your own start page using HTML code or point to another web page / site. Type **http://www.wikipedia.org** in **Location:**. Click **OK**.
3. Close and re-open Mozilla Thunderbird.
4. Observe the results displayed (figure adjacent).



Mozilla Thunderbird includes ***about***

protocol links, a pre-programmed list of special links that may be used instead of a web page. These are used for general information and troubleshooting purposes. For example, to view memory utilization, do the following

1. Select **Tools > Options**. **Options** dialog box appears.
2. Type **about:memory** in **Location:**. Click **OK**.
3. Close and re-open Mozilla Thunderbird.
4. Observe the list of add-ons displayed (figure adjacent).



Some of the other options are listed below for your reference:

- about:buildconfig
- about:cache
- about:about
- about:addons
- about:crashes

For complete list, refer: http://kb.mozillazine.org/About_protocol_links.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Customize the home page in Microsoft Outlook to display the following URL's: a. http://www.linkedin.com b. http://kb.mozillazine.org c. http://www.about.com
2.	Apply the following about protocol links in Mozilla Thunderbird: • about:buildconfig • about:cache • about:about • about:addons • about:crashes

ASSESSMENT

Answer the following

1. Explain the purpose of outlook view control.
2. Explain the procedure to include an URL as home page in Microsoft Outlook.
3. Explain the procedure to include outlook view control as home page in Microsoft Outlook.
4. Explain the purpose of about protocol links in Mozilla Thunderbird.
5. Explain the procedure to include an URL as home page in Mozilla Thunderbird.
6. Explain the procedure to include about protocol links in Mozilla Thunderbird.

Fill in the blanks

1. List any three about protocol links in Mozilla Thunderbird: _____, _____ & _____.

SESSION 10 SETTING PREMISSIONS AND DELEGATING ACCESS

Learning Objectives:
At the end of this session, you will be able to:

- Delegate your e-mail and calendar.

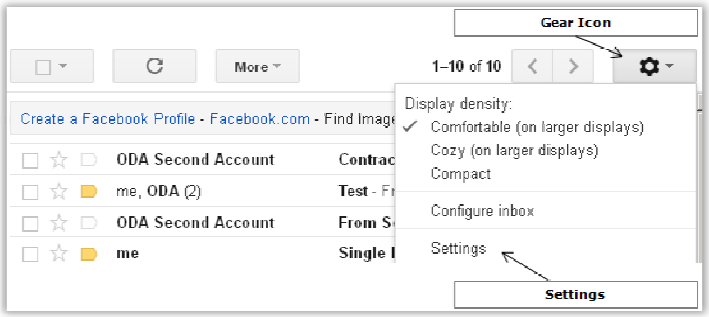
RELEVANT KNOWLEDGE

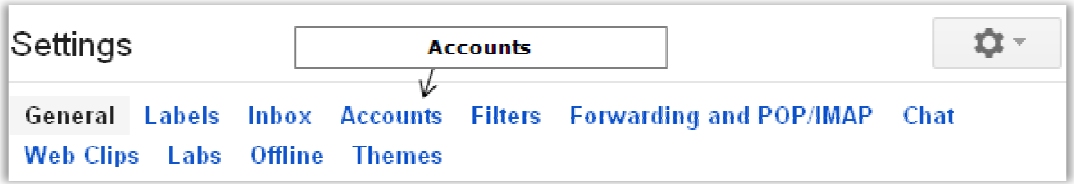
You have learnt to use e-mail messaging software to manage e-mails, tasks and appointments. You can allow other users for example your assistant to manage your e-mails, tasks and/or appointments. This is referred to as "***Delegation***".

Note: Using your e-mail messaging software for this particular task requires a special setup hence an alternate solution is explained here as a reference to help you understand this concept.

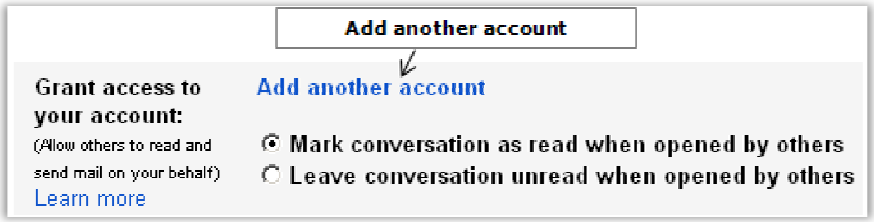
To delegate e-mail access, do the following:

1. Go to Gmail.com and login with your credentials.
2. Click the **Gear** Icon ( ). Click **Settings** from the dropdown (figure above). Settings page will be displayed.

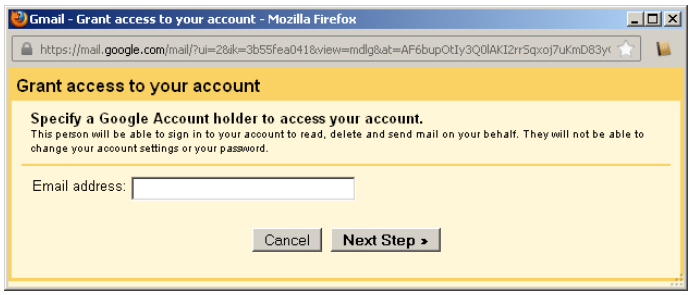




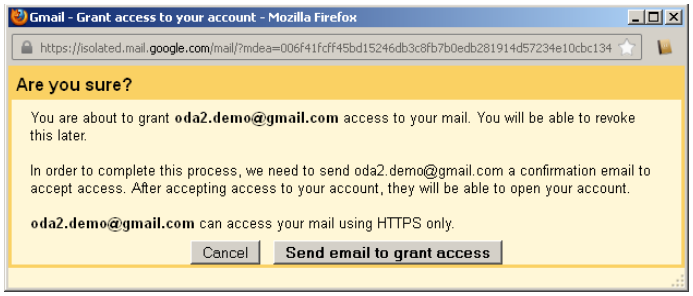
3. Click **Accounts**. Scroll down the web page and click **Add another account** (figure below).



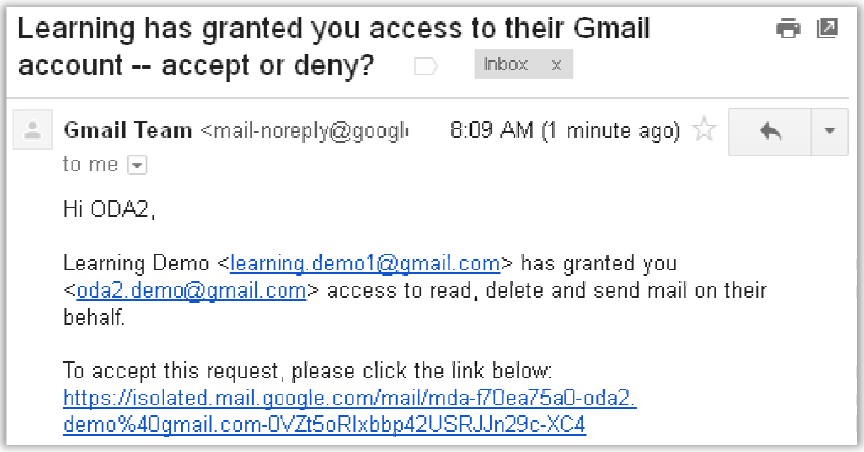
4. **Grant Access to your Account** popup appears (figure adjacent).



5. Type the e-mail address of another user whom you want to delegate access. For example your classmates e-mail address, Click **Next Step >**. You will see a window similar to the one adjacent (confirmation).



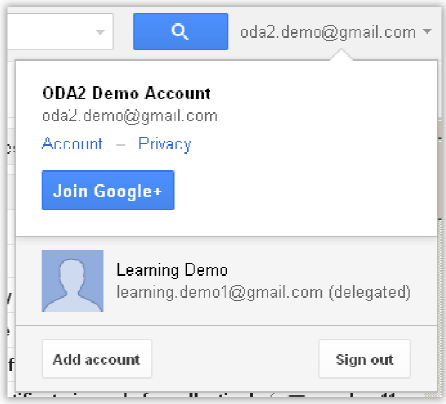
6. Click **Send E-mail to grant access.** A popup appears as shown adjacent - below.
7. Now the recipient will receive an e-mail similar to the one below:



8. Click on the link given in the e-mail (**please click the link below:**) to accept the request,. A popup appears similar to the one below.



9. Now click the dropdown arrow next to your e-mail address. Notice the delegated account is displayed (figure adjacent).
10. Click on the delegated account to work with the mailbox. On doing so, the delegated user's mailbox is displayed in a different window. Notice that no password was required to access the delegated account.

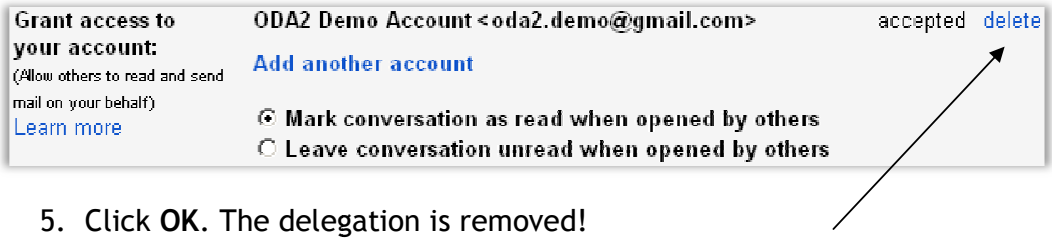


Note: When you delegate to a particular user, the delegate can manage the mailbox and perform activities such as receive, read, or delete e-mails. However the delegate cannot change password or modify any other settings.

Removing a delegation

To remove a delegation, do the following:

1. Login with your account.
2. Select the **Gear** icon and click **Settings**.
3. Click **Accounts**.
4. Select the option **Delete** (figure below).



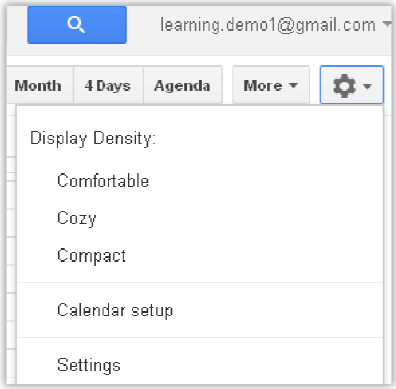
5. Click **OK**. The delegation is removed!

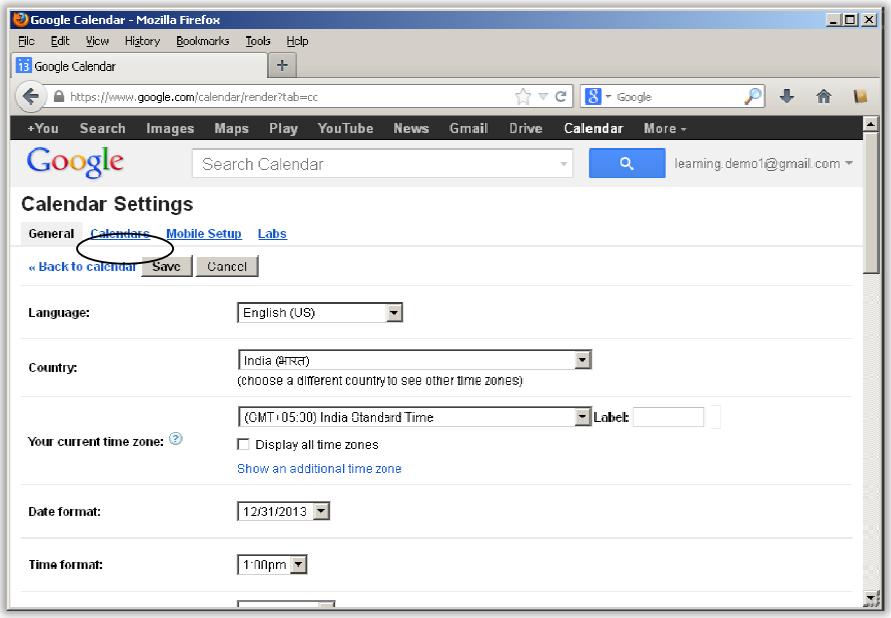
Delegate Calendar

You may want to delegate your calendar too to your secretary who manages your (the manager's) schedule.

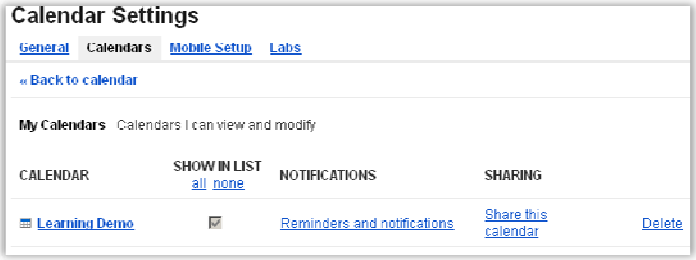
To delegate Calendar, do the following:

1. Sign in to **Gmail.com** with your credentials.
2. Click **Calender** hyperlink at the top (below the address bar).
3. Click **Gear** icon, click **Settings** (figure adjacent).
4. A **Calendar Settings** dialog box appears (figure below).

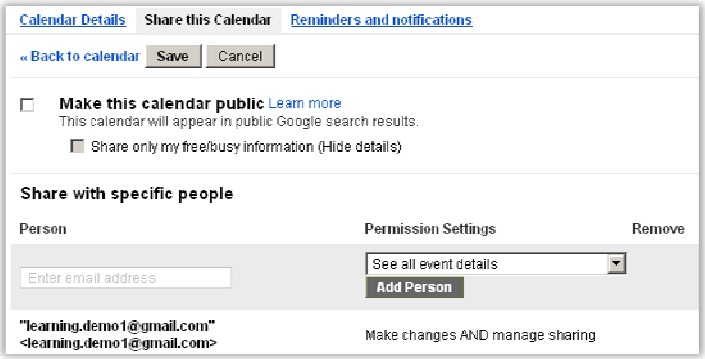




5. Click **Calenders** under **Calender Settings**. A window similar to the one adjacent appears.



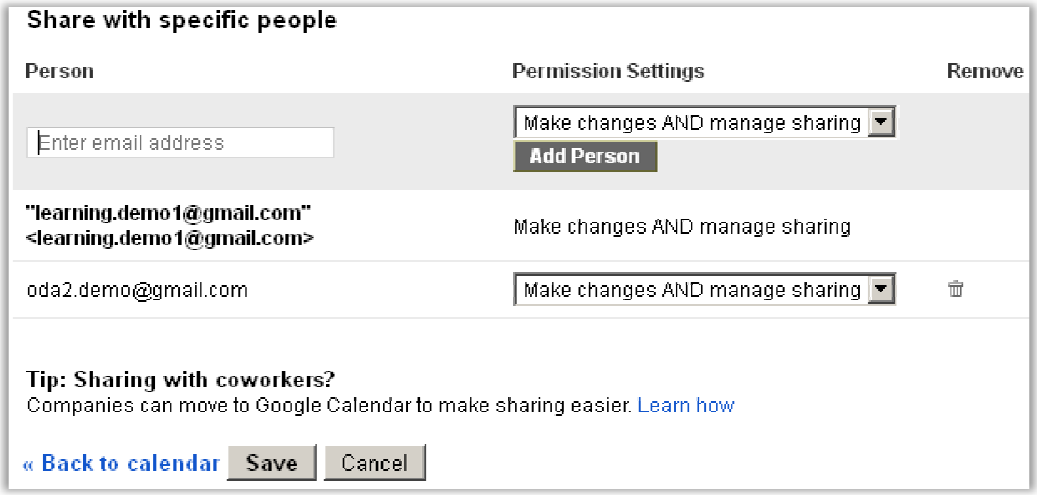
6. Click **Share this calendar** under **Sharing**. A **Share this Calendar** web page appears (figure below).
7. You can either share this calendar:
   a. With the public so anyone can view your calendar.
   b. Share this with a particular person who can view or manage your calendar.



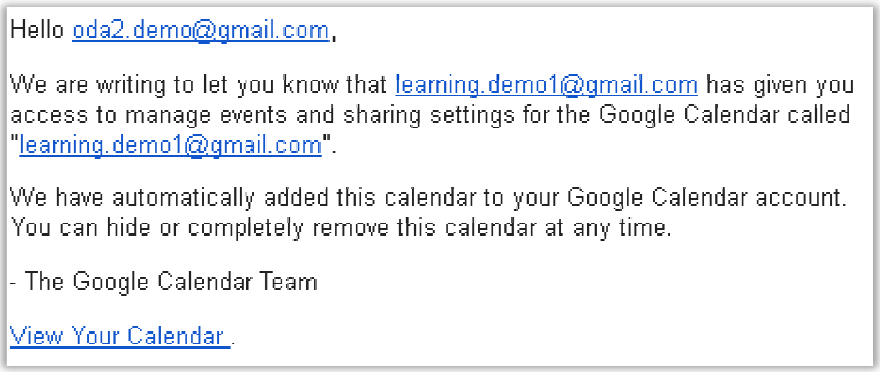
8. To share this calendar with a particular person, type the e-mail address of the person under **Person** text box (figure below) and select **Make Changes AND manage sharing** from **Permission Settings** dropdown (figure below).



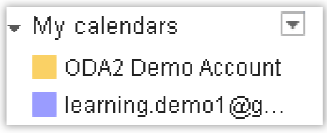
9. Click **Add Person**. Notice the e-mail address and permissions displayed (figure below).



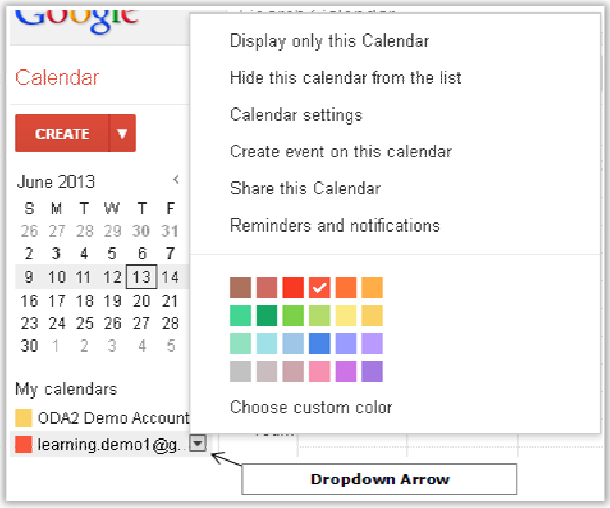
10. Click **Save**.
11. Now the assistant or friend when they login to their E-mail will receive a notification similar to the one below.

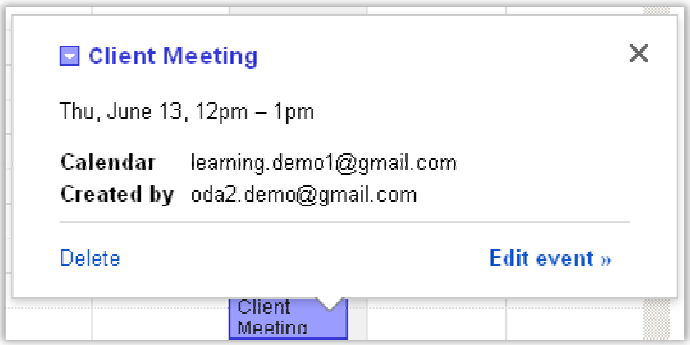


12. Click the link **View your Calendar** (figure above) to see the change. Also link to the delegated calendar will be displayed under **My Calendars** (figure adjacent).



13. Now go ahead and create items in the delegated calendar. Click the dropdown arrow next to the delegated e-mail address (not yours!), click **Create event on this calendar** from the popup menu (figure adjacent).
14. Notice the event displayed in different colours.
15. Also login to your calendar and notice the item created by the delegate displayed (figure adjacent).
16. Notice the e-mail address specified in **Calendar** (Your e-mail address) and **Created by** (Your assistant or friend's e-mail address) fields.





EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Delegate your email and calendar to one of your classmate.

ASSESSMENT

Answer the following

1. Explain the purpose of delegation with an example.
2. Explain the procedure to delegate email access.
3. Explain the procedure to delegate calendar access.

Fill in the blanks

1. _____ refers to providing access to your emails and calendar for others to manage.



SECTOR: IT-ITes

NSQF Level 4 (CLASS XII)

Student Workbook - Vol. 3

PSS Central Institute of Vocational Education, Bhopal
(a constituent unit of NCERT, under Ministry of Human Resource Development, Government of India)

Student Details

Student Name:_____

Student Roll Number:_____

Batch Start Date:_____

PREFACE

Background

The National Curriculum Framework, 2005, recommends that children's life at school must be linked to their life outside the school. This principle makes a departure from the legacy of bookish learning which continues to shape our system and causes a gap between the school, home, community and the workplace.

The student workbook **Volume 3** on **"Web Design and Development"** is a part of the qualification package developed for the implementation of National Vocational Education Qualification Framework (NVEQF), an initiative of Ministry of Human Resource Development (MHRD), Government of India to set common principles and guidelines for a nationally recognized qualification system covering Schools, Vocational Education and Training Institutions, Technical Education Institutions, Colleges and Universities. It is envisaged that the NVEQF will promote transparency of qualifications, cross-sectoral learning, student-centered learning and facilitate learner's mobility between different qualifications, thus encouraging lifelong learning.

This student workbook, which forms a part of vocational qualification package for students who have passed Class X or equivalent examination, was created by a group of experts. The IT-ITeS Skill Development Council approved by the National Skill Development Corporation (NSDC) for the IT/ITES Industry developed the National Occupation Standards (NOS). The National Occupation Standards are a set of competency standards and guidelines endorsed by the representatives of IT Industry for recognizing and assessing skills and knowledge needed to perform effectively in the workplace.

The Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), a constituent of National Council of Educational Research and Training (NCERT) in association with Wadhwani Foundation has developed modular curricula and learning materials (Units) for the vocational qualification package in IT/ITES sector for NVEQ levels 1 to 4; level 1 is equivalent to Class IX. Based on NOS, occupation related core competencies (knowledge, skills, and abilities) were identified for development of curricula and learning modules (Units).

This student workbook attempts to discourage rote learning and to bring about necessary flexibility in offering of courses, necessary for breaking the sharp boundaries between different subject areas. The workbook attempts to enhance these endeavors by giving higher priority and space to opportunities for contemplation

and wondering, discussion in small groups and activities requiring hands-on-experience. We hope these measures will take us significantly further in the direction of a child-centered system of education outlined in the National Policy of Education (1986). The success of this effort depends on the steps that school Principals and Teachers will take to encourage children to reflect their own learning and to pursue imaginative and on-the-job activities and questions.

Participation of learners in skill development exercises and inculcation of values and creativity is possible if we involve children as participants in learning, and not as receiver of information. These aims imply considerable change in school routines and mode of functioning. Flexibility in the daily time-table would be a necessity to maintain the rigor in implementing the activities and the required number of teaching days will have to be increased for teaching and training.

Acknowledgements

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2. The Wadhwani Foundation team involved in designing and building this curriculum and content include Ms. Sonia Kakkar, Mr. Karthik Chandru, Ms. Rekha Menon, Mr. Ajay Goel and Mr. Austin Thomas.

3. The PSSCIVE‟s team was involved in guidance and editing the content.

4. In addition, various public domain sources have been leveraged to create materials and illustrations across module. The contributions of all these sources is gratefully acknowledged and recognized.

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WEB DESIGN AND DEVELOPMENT

SESSION 1: INTRODUCTION

Lesson Objectives:

At the end of this session, you will be able to:

- Understand the purpose of web authoring tools.
- Understand the purpose of Expression Web.
- Understand Microsoft Expression Web user interface.

RELEVANT KNOWLEDGE

You have learnt to use HTML & CSS to create web pages. You know that to design a professional looking website, you need to write hundreds of lines of code creating several chances for errors. As you can very well imagine it is a very difficult task for any developer to write thousands of lines of code to create a website including many hyperlinks, images, multimedia content, etc. apart from standard web site content. As a solution to this problem, you may use a web authoring tool.

Web authoring tools simplify your web page development tasks. HTML editors, referred to as web authoring tools are applications that write & check HTML code for you and help save your time and effort.

HTML editors are referred to as WYSIWYG (what you see is what you get) editors. This is due to the fact that what you see during the design phase is what you get as an output viewed in a web browser (or at least very close to it). Usually, websites are first designed offline using HTML editors, then tested, and, later uploaded to websites.

Some of the popular HTML editors include Amaya, Adobe Dreamweaver, KompoZer, Microsoft Expression Web, etc. Some web hosting provides provide online tools to design websites but this usually requires a high-speed Internet connection.

Advantages provided by HTML editors are:

- **Generate Standard Compliant Code**: The developer need not worry whether the code written conforms to standards such as HTML 5, CSS3, etc. The editor takes care of standards.
- **HTML & CSS Validation**: Each and every line of code is checked to ensure it is free of errors and/or standard compliant.

- **Generate Compatibility Reports**: The editor generates reports based on compatibility with multiple versions of varying browsers.
- **Spell Check:** The editor checks for spelling mistakes in content similar to that of word processing software.
- **Optimize HTML**: The editor "cleans" out unnecessary code resulting in smaller web page size enabling a faster download of the web page.
- **Multiple Resolution / Browser Views:** The editor automatically checks your web page/website across multiple screen resolution/sizes (Smartphone, net-book etc) and also across multiple browsers (Mozilla Firefox, Google Chrome, etc.).
- **SEO (Search Engine Optimization):** The editor prepares your website in the manner that search engines can understand and thereby helps your website to gain a better ranking for search results.
- **Support for Add-ons**: The editors support 3rd party add-ons which add additional capabilities to the HTML editor.
- **Multiple Publishing Methods:** Editors have the ability to use different options such as FTP, WebDAV, etc. to publish your website on remote computers.

Microsoft Expression Web

Microsoft Expression Web is a free HTML editor and web design software product by Microsoft. One great advantage of MEW is the ability to create and manage web pages using HTML, XML, CSS, ASP.NET, XHTML, PHP and JavaScript.

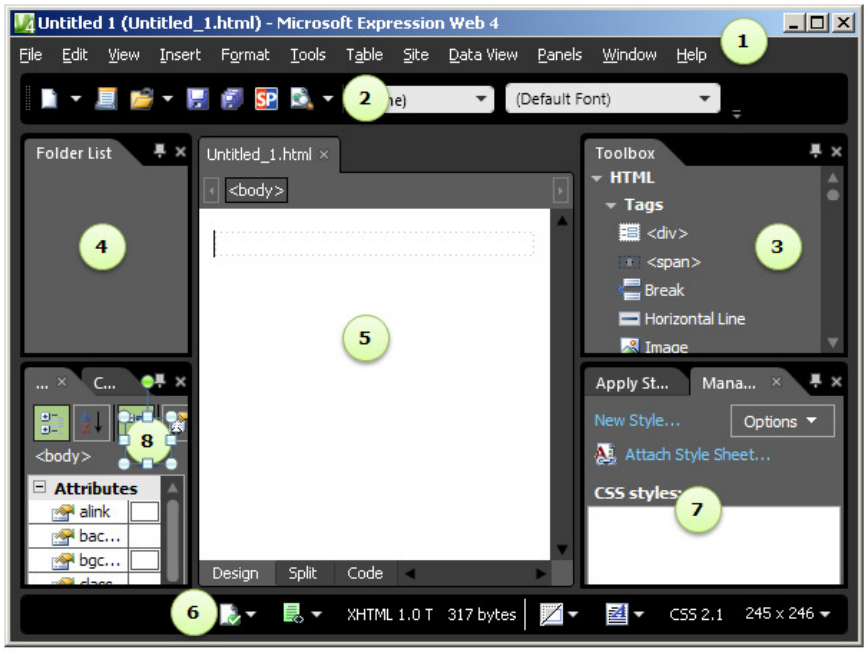
Note: This module focuses only on Microsoft Expression Web using HTML.

Installing Microsoft Expression Web

To work with MEW, do the following:

1. Download Microsoft Expression Web 4 (recent and last version) from Microsoft.com.
2. Install by following the on-screen instructions.
3. Click ***Start > Programs > Microsoft Expression Web***.

The MEW Interface



MEW User Interface explained:

1. ***Menu Area***, displays menu items such as File, Edit, etc.
2. ***Toolbar Area***, displays icons to Menu Items.
3. ***Toolbox***, contains HTML elements and ASP.NET items.
4. ***Task Pane***, displays folders, images, etc. in a website in folder list view.
5. ***Editing Area***, displays the HTML editing area.
6. ***Status bar***, displays additional document properties.
7. ***Style Sheet Area***, to manage style sheets.
8. ***Attributes & Elements Area***, displays HTML attributes & values and CSS property and values.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Discuss the benefits of HTML Editor by comparing different HTML editors. Use Wikipedia to learn more about HTML Editors.

ASSESSMENT

Answer the following questions:

1. Explain the benefits of HTML Editors.
2. List any five HTML editors.

Fill in the blanks:

1. _____ are software that produces HTML code without writing HTML.
2. _____, _____ & _____ are free HTML Editors.

SESSION 2: CREATING WEBSITES AND WEBPAGES IN A WEBSITE

Lesson Objectives:

At the end of this session, you will be able to:

- Create a new site.
- Create and save a web page.

RELEVANT KNOWLEDGE

You can create websites with your own design. When you work with web pages, images, style sheets, etc., you need to store all the related files in a single location (folder). This helps you to:

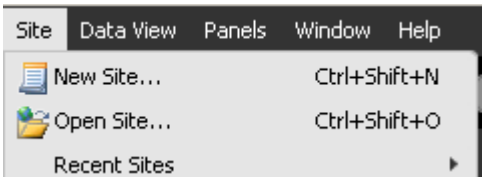
- Stay organized
- Upload the entire content to the remote server when you want to publish the website.

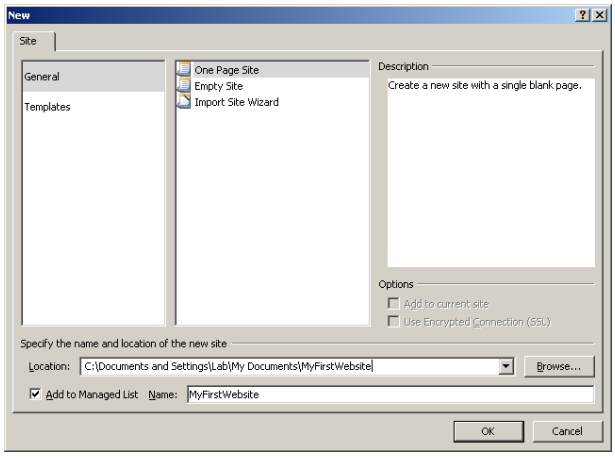
Note: You will learn about templates later in this module.

Creating a Website

To create a new website,

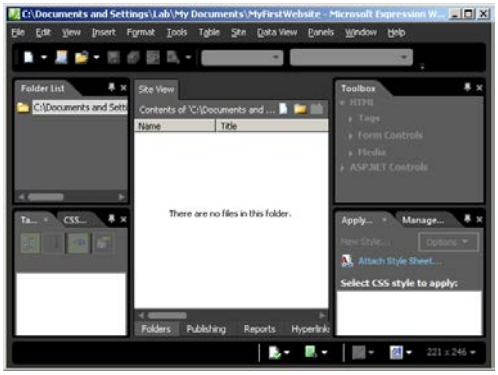
1. Select ***Site*** > ***New Site…*** (figure below, left). A **New** dialog box appears (figure below, right).





   a. You can create a website with a single page by selecting ***One Page Site***.
   b. You can create a website from scratch by selecting ***Empty Site***.
   c. If you already have a website created using HTML or any other software, you can continue to work with the website using MEW once it is imported. To import an existing website, use the ***Import Site Wizard***.

2. Select ***Empty Site*** and enter a name for the website, for example: ***MyFirstWebsite***. Click ***OK***.
3. A website is created and you will notice a window similar to the one adjacent:



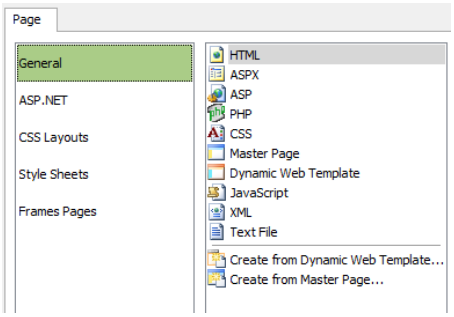
Now you can create web pages for this website. Navigate to the location (example: My Documents) where you stored the website. Notice the folder icon.



Content such as images, flash animations, web pages & style sheets, etc. will be automatically stored in this folder.

Create a Web page

Once the website is created, you need to create web pages. To create a webpage, do the following:



1. Select ***File > New > Page***…. A window appears similar to the one adjacent.
2. You can use MEW to create web pages using HTML or ASP code, Style Sheets (CSS), etc. Select ***HTML*** from the list and Click ***OK***. Notice that a new page is created (figure below).

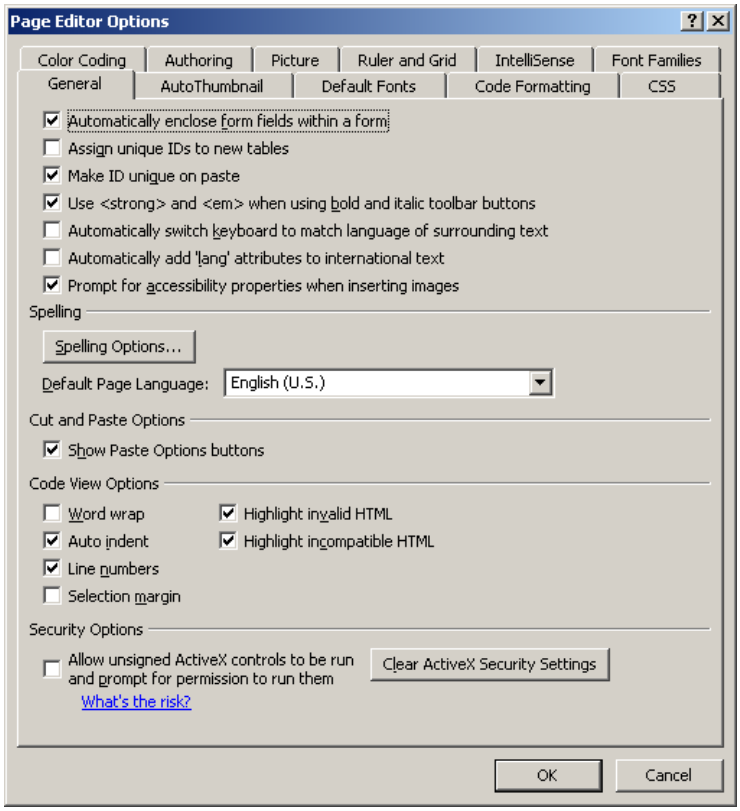


3. Notice the file name ***Untitled_1.html***. Being the first page of the website, this page is may be your homepage. Use a standard naming convention such as default.htm, index.htm or home.htm and save this page. To save this page, select ***File > Save***.
4. Type the file name as ***default*** and select ***Save***. You need not specify .htm or .html extension as it is automatically added to the web page.

Handling File Extensions

HTML Editors such as MEW automatically append the required file extension, .html by default. You can configure the HTML editor to add the extension .htm by the following procedure:

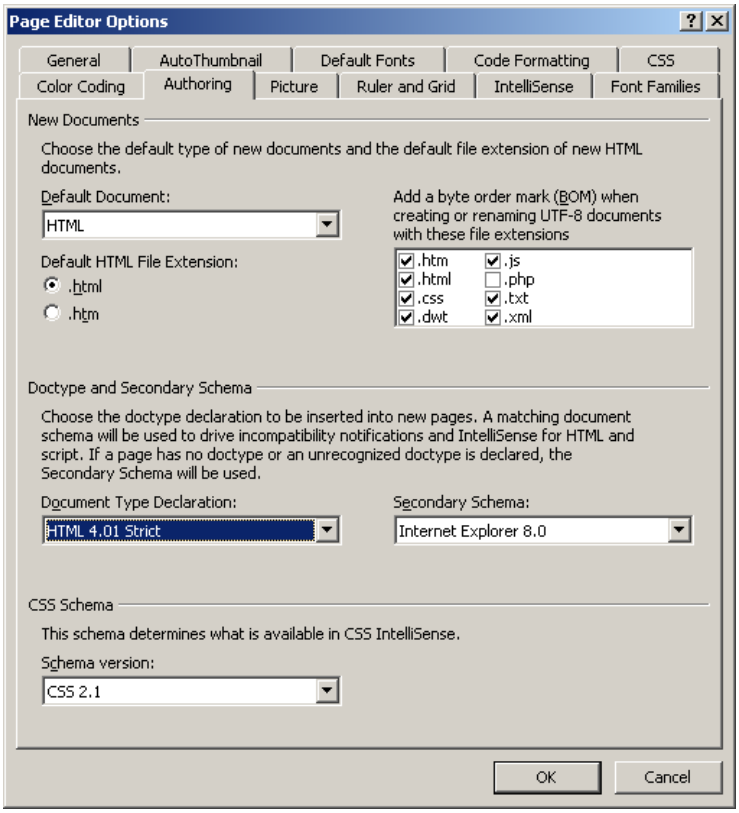
1. Select ***Tools > Page Editor Options…***. The ***Page Editor Options*** dialog box appears (figure adjacent).
2. Select the ***Authoring*** Tab (figure below).
3. Notice the default document type selected as ***HTML*** under ***Default Document:*** dropdown menu and file extension selected as ***.html*** in ***Default HTML File Extension:*** option.



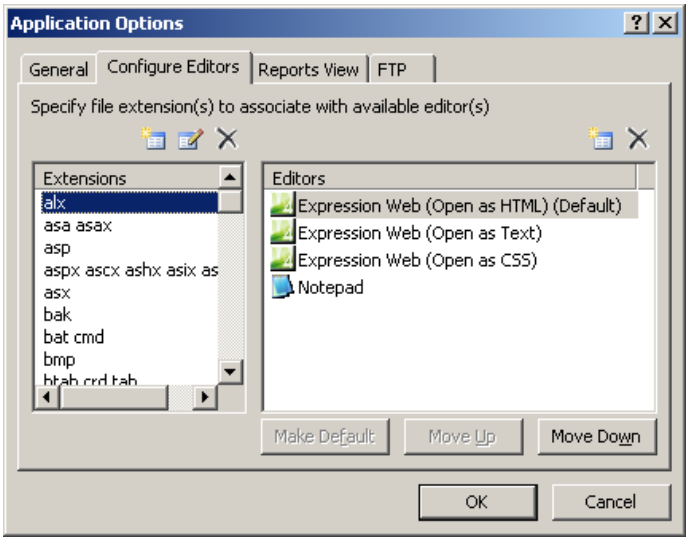
You can change the settings, and, it is recommended to change ***Document Type Declaration*** to ***HTML 5***.

You can configure expression web to use external programs such as notepad to open specific file types such as a style sheet. By default, style sheets open in expression web. To modify, do the following:

1. Select ***Tools > Application Options…***. The ***Application Options*** dialog box appears (figure below).
2. Select the ***Configure Editors*** Tab (figure below).
3. Notice the file extensions (left pane) and application that will handle the extension (right pane) displayed.



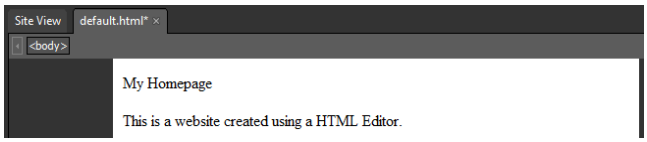
Note: **Do NOT** change any settings here for now.



Working with a Web page

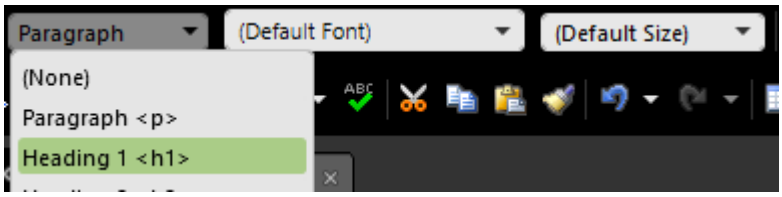
The biggest advantage of HTML editors such as MEW is that the code is written for you by the software.

1. Type the following in the body area (figure below):
    a. My Homepage.
    b. This is a website created using a HTML Editor.

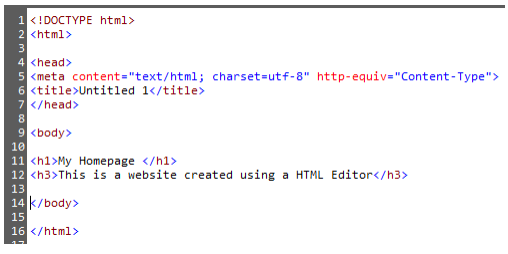


When you create content, MEW automatically intends them as paragraphs. You may notice the paragraph element indicated (see figure above) as "p" with a box above around the content. When you use carriage return (Enter key), MEW inserts another paragraph similar to that of the word processing software.

2. Now select the text "My Homepage" and do the following:
    a. Select the ***Style*** dropdown located in the toolbar (figure adjacent)
    b. Select ***Heading 1 <h1>*** from the list.



3. Now select the text "This is a website created using a HTML Editor." Select ***Heading 3 <h3>*** from the style dropdown list.
4. Once complete, select ***View (Menu) > Page > Code*** (or select Code located above the status bar). You will see a screen similar to the one adjacent.
5. Notice the text is enclosed using heading (h1 and h3) elements. Now save this page (CTRL+S).



Since the editor writes the code for you; you can stay focused on creating the content rather than focusing on the code!

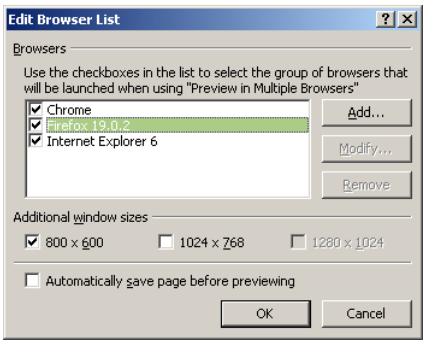
If you have noticed, there are pre-built standard HTML elements that you can use in a webpage by just selecting the element from the style dropdown menu Now to switch back to design view, select ***View > Page > Design***.

The three views available in MEW are:

1. **Design View**: This is the default view and displays only the content.
2. **Code View**: This is used either when you want to view the source code written by the HTML editor or, when you want to insert elements or code that is not available within the HTML editor.
3. **Split View:** This is used when you want to use both the Design and Code View side-by-side.

Using Multiple Web Browsers

If you want to test your web page, it is a recommended practice to test using multiple web browsers. However you may need to set up the browser list. To specify multiple browsers, do the following:



1. Select ***File > Preview in Browser > Edit Browser List….*** The ***Edit Browser List*** dialog box appears.
2. You may notice that some web browsers are added to the list by default. If you want add a web browser (for testing), select ***Add…***, and specify the path of the executable file of the web browser (for example: C:\Program Files\Google\Chrome\Application\chrome.exe).
3. You can also use set the screen resolution here. This could be useful when you want to test your pages for viewing on Smartphones or tablets that use different screen resolutions.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Build a website on any of the following topics: a. Computer Shop (Sales & Service) b. Bakery Visit different websites that offer this service and discuss how they are designed. Create a new empty website in MEW, create at least 2-3 web

	pages and use different HTML elements such as Headings, Strong, etc. when presenting content.
2.	Add Mozilla Firefox to the Edit Browser list.

ASSESSMENT

Fill in the blanks:

1. New Site is available in _____ menu.
2. _____, _____ & _____ are type of pages can be created by HTML Editor.

SESSION 3: TEMPLATES AND IMPORTING WEBPAGES

Lesson Objectives:

At the end of this session, you will be able to:

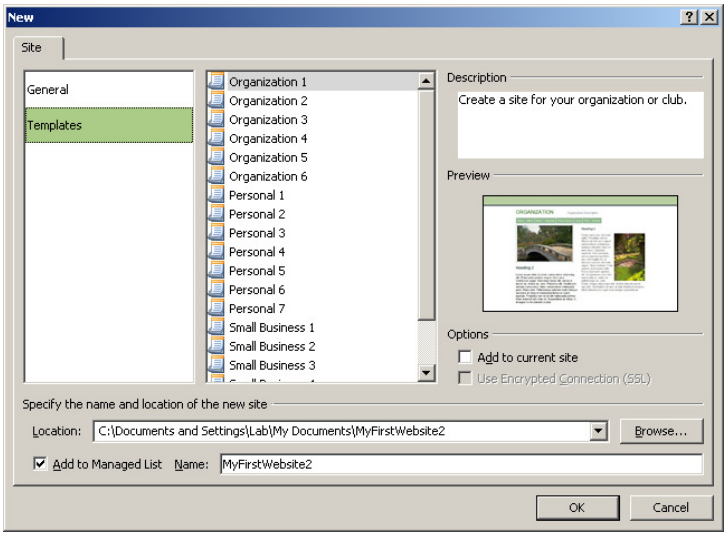
- Create websites using templates.
- Import sites.

RELEVANT KNOWLEDGE

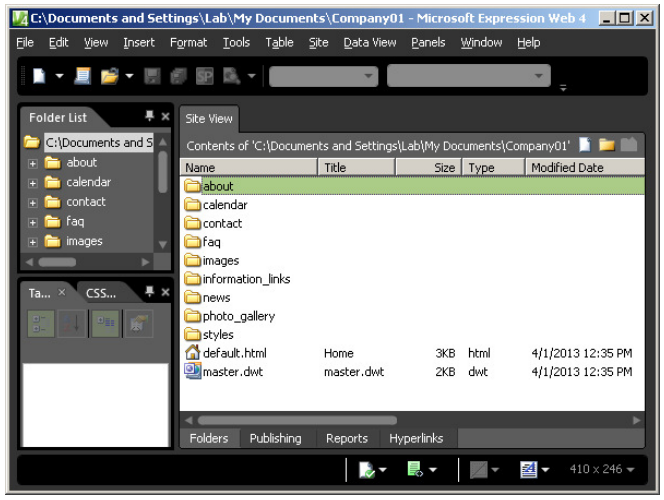
Templates help in saving time and effort. A template for a website usually consists of HTML, CSS and image files that can be readily used for creating similar websites. You can use the built-in templates in Microsoft Expression Web to design websites.

Create a new website using templates

MEW includes many (19) built-in templates that can be used for creating websites. To create a website using the built-in template, do the following:



1. Select **Site > New Site…**
2. Select ***Templates*** and choose a template, for example ***Organization 5*** from the list
3. Type a new for this website, for example: ***Company01***.
4. Change the location and store this website in ***C:\Documents and Settings\Lab\My Documents\Company01***. Then click ***OK***. A website based on the template Organization 5 will be created (figure adjacent). Notice the folders and files in the folder list. Now to work with the website, you can open any of the files listed here.



5. To work on the homepage, double-click ***default.html***. You can change only certain parts of this web page, because, when you make websites from templates, MEW uses **DWT (Dynamic Web Template)**. You will learn more about DWT in later sessions. The text is editable within this page



6. You can view this website in a browser to see how it will appear to visitors. To preview this website in a browser, press ***F12*** on your keyboard. The website appears on the default web browser. Use the navigation links on the left side of the homepage to view other pages.

Though it takes some time to get used to an HTML editor, you will soon be creating web pages or sites in no time with minimal efforts.

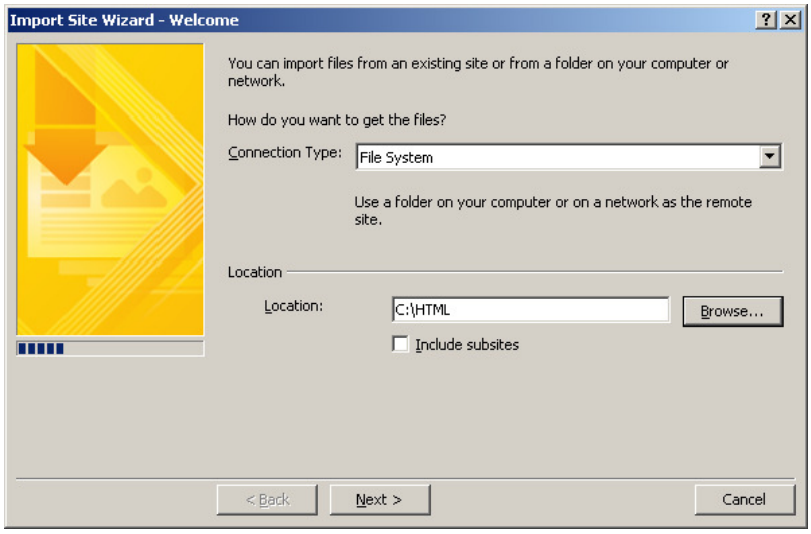
Importing Sites

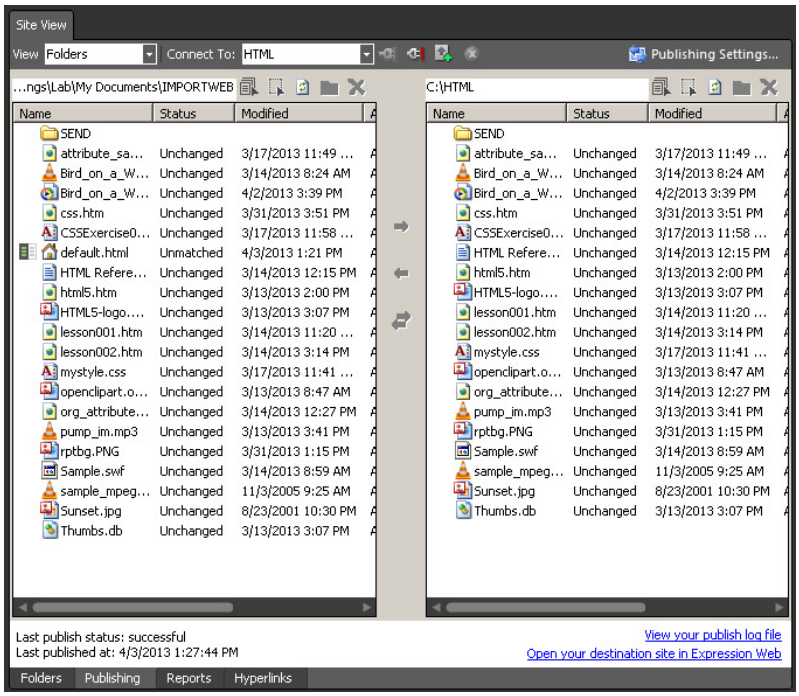
If you have used another HTML editor or created files using a text editor, you can import them into your website. This is useful when you want to either use MEW HTML editor (ease of use) or to organize different files under one common website. You can also import websites that are already hosted (running live) using MEW. For example if you have created files manually and saved in C:\HTML and you want to import them, do the following:



1. Create a New Website and give it a name, for example: ***IMPORTWEB***.
2. Select ***Site > Import > Import Site Wizard…*** .
3. The **Import Size Wizard** dialog box appears.
4. Notice the list of values in ***Connection Type:*** dropdown menu.
5. Select the option ***File System*** from the ***Connection Type:*** dropdown menu.
6. Click the ***Browse…*** button and specify the file path ***C:\HTML***. Click ***Select***.

7. Click ***Next***.
8. The Import Wizard creates a copy of the original content in C:\HTML. This can be helpful as your original files are left as it is. Click ***Next***.
9. Click ***Finish***. A List of files is displayed. For importing to your new website, you can select either individual files/folders, or the entire content of a folder. To import entire content, select all the items on the left pane and select  . Notice the results displayed (Figure adjacent).





Now you can use the imported files. The original files in C:\HTML are left as is.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a website using any of the built-in template (choose a topic from the list below). Replace the content with your own relevant content. a. Household Supplies b. Pet Care c. Sports Shop d. Virtual Museum

ASSESSMENT

Answer the following questions:

1. Explain the procedure to create a website using templates.
2. Explain the purpose of importing a website with the procedure.

Fill in the blanks:

1. Number of built-in templates ___.
2. Three categories of templates are _____, _____ & _____.
3. Templates are available in ____ menu.
4. __ function key is assigned for previewing web pages or websites.
5. Import Site Wizard is available in ____ section of Site Menu.

SESSION 4: LISTS, FORMATING, SPELL CHECK AND FIND & REPLACE

Lesson Objectives:
At the end of this session, using MEW, you will be able to:

- Work with lists.
- Format text.
- Use Spell Check.
- Use Find and Replace.

RELEVANT KNOWLEDGE

In the previous session, you learnt to work with headings and paragraphs. You can also work with HTML elements such as lists, images, tables, etc. in MEW.

Create Unordered lists

You can create a list using the procedure similar to the one you used in word processing software. To create an unordered list, do the following:

1. Create a new page, save this page as ***unorderedlists.html***.
2. Type the following text (within quotes):

"An electronic book or EBook is a book published in digital form. It consists of text, images, or both. EBooks are readable on computers, net-books and Smart phones. EBooks are available in the following formats:"

3. Now place the cursor on the next paragraph.
4. Select ***Unordered List*** from the ***Style*** dropdown menu.
5. Type the following (press enter after each entry):
    a. DjVu
    b. EPUB
    c. HTML
    d. iBook (Apple)
    e. KF8
    f. LIT (Microsoft)

```
<ul>
    <li>DjVu</li>
    <li>EPUB</li>
    <li>HTML</li>
    <li>iBook (Apple)</li>
    <li>KF8</li>
    <li>LIT (Microsoft)</li>
</ul>
```

6. Check the results in web browser (use **F12** key).
7. Switch to MEW and select ***View*** > ***Page*** > ***Code***. Notice the code written by the HTML editor for unordered list (Figure above).

Handling Text

You can align or format the text using the options in the common toolbar located below the HTML Editor Menu. This is very similar to word processing software; however, remember that being a web page, special code is needed for formatting and displaying the text.



You can simply select the items from the toolbar and work as if you work with a regular document. HTML Editor writes the code for you! Switch to ***Code View*** when you use the toolbar items to view the source code.

Spell Check and Thesaurus

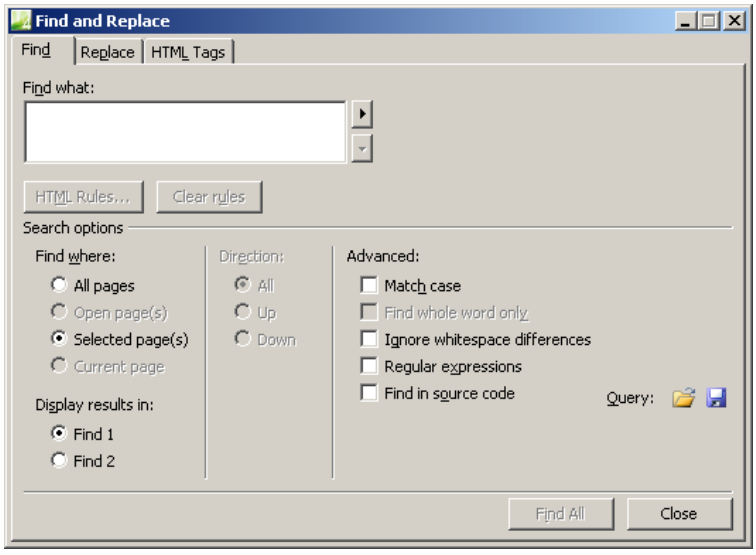
When you focus on creating content, you may make spelling mistakes. As a solution, HTML Editor has an in-built spell check program. To do a spell check on the current web page, do the following:

1. Open a web page with some content. (Create some content with spelling mistakes if you don't have one)
2. Select ***Tools > Spelling > Spelling (F7)***…. Notice the spell check utility checking spelling mistakes just as in a word processing software.

You can also use the built-in Thesaurus option by selecting ***Tools > Thesaurus***.

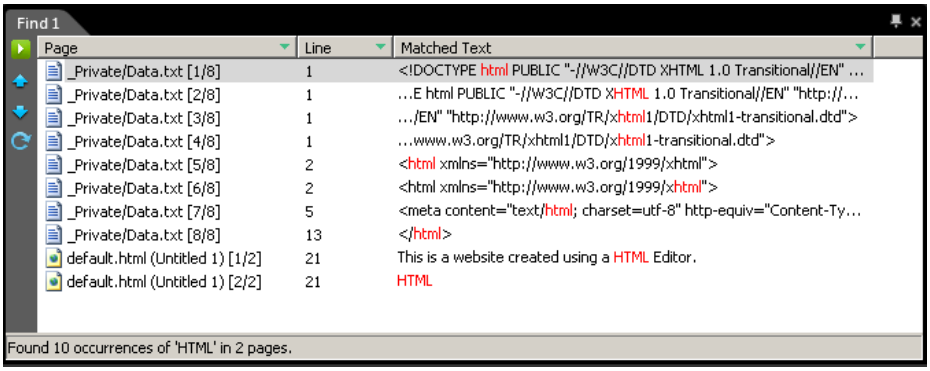
Find and Replace (Text)

If you want to replace a misspelled author or company name across a website, what would you do? You can use the find and replace dialog box to replace text either on a single web page or across an entire website. The functionality is very similar to a word processor. To find a particular text, do the following:



1. Select ***Edit > Find***. The ***Find and Replace*** dialog box appears (figure adjacent). Notice the tabs - one for **Find** another for **Replace** and a third for **HTML Tags**.
2. To search for a particular

keyword across all pages in a website, enter a keyword in the ***Find What:*** text box and select ***Find All….*** See the results. Double-clicking on any item in the listed result automatically opens the corresponding web page with the keyword highlighted for further action.

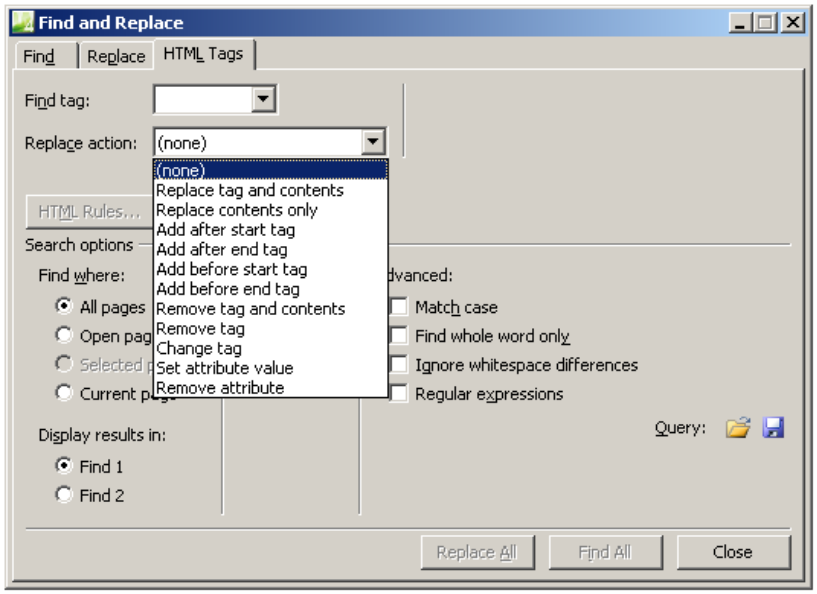


Now explore and the ***Replace*** tab to replace an existing text.

Find and Replace (HTML Tags)

If you had initially set a table background color as blue and now want to replace it with another color, what do you do? Use the HTML tab of the Find and Replace feature! Using this, you can replace attributes, values or even a tag across a website. To use this feature, do the following:

1. Select ***Edit > Replace***.
2. Select the ***HTML Tags*** tab.
3. Select the appropriate option from the ***Replace action:*** dropdown menu. Note the list of actions that can be performed



EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a HTML page utilizing the following HTML Elements: a. Ordered List & Definition List b. Bold, Italics, Underline & Text Alignment
2.	Use Spell Check to correct spelling errors in the website created earlier.

ASSESSMENT

Fill in the blanks:

1. You can view the HTML code in HTML editor by selecting _____.
2. _____ is the shortcut key to launch Spell Check.
3. ___ is the shortcut key to launch find tool.
4. ___ is the shortcut key to launch replace tool.

SESSION 5: TABLES AND CELLS

Lesson Objectives:

At the end of this session, you will be able to:

- Create tables using MEW.
- Merge and split cells.
- Use image background for cells.

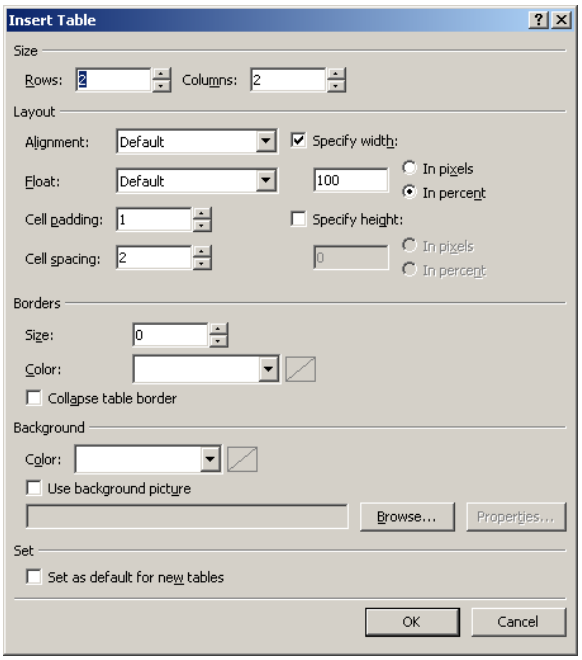
RELEVANT KNOWLEDGE

MEW simplifies the tough task of creating a table using HTML with many rows and columns.

Creating tables

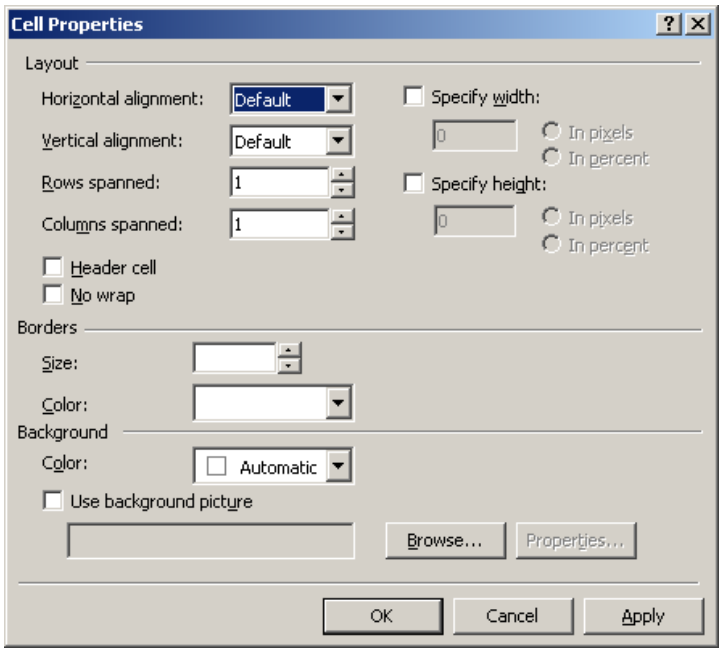
To create a complex table, do the following:

1. Create a new page, save this page as ***tables.html***.
2. Switch to ***Design View***. Place the cursor where you want to position the table.
3. Select ***Table > Insert Table…***. A dialog box appears similar to the one adjacent.



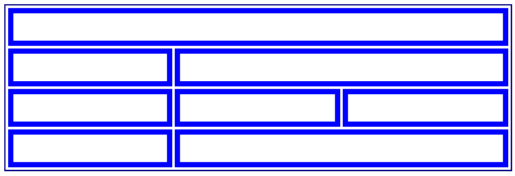
4. Here you can specify the number of rows and columns, border size, border color etc. Do the following:
   a. Type 10 in ***Rows*** under ***Size*** section.
   b. Type 10 in ***Columns*** under Size section.
   c. Type 3 in ***Size*** under ***Borders*** section.
   d. Select Maroon from ***Color*** dropdown menu under ***Borders*** section.
   e. Click ***OK***.
5. Imagine how many lines of code you would have typed to have such a result! Now to view the HTML code, select ***View > Page > Code***.
6. Switch to ***Design View***. To create borders for cells, select all the cells in the table.

7. Select ***Table > Table Properties > Cell….*** The ***Cell Properties*** dialog box appears (Figure below).
8. In the ***Borders*** section, type 1 in ***Size:*** and select *Olive* from ***Color:*** dropdown. Click ***OK***.
9. Save the page and view in browser (**F12**). MEW creates style sheet codes and placed them within this webpage by default. Now switch to code view, scroll to the top and see the code available under **<style>** and **</style>** element. Now scroll down and see the style applied to the table and cell. So much time and effort has been saved!



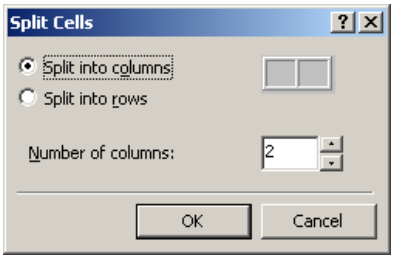
Merging and splitting cells

You have created table structures like the one adjacent in word processors. But for a web page, you will need to write a lot of code to achieve the same!



Using a HTML editor, it is easy. All you need to do is:

1. Create a new page, save this page as ***mergetables.html*** .
2. Insert a table (for example, 2 rows and 2 columns).
3. Select the cells that you want to merge and then select ***Table > Modify > Merge Cells***.
4. Similarly, to split cells, select a single cell. Select ***Table > Modify > Split Cells….*** The ***Split Cells*** dialog box is appears (figure adjacent).
5. To split this cell into five rows, select ***Split into rows*** and type 5 in **Number of Columns:**. Click ***OK***. Note, the entire table is auto adjusted to fit content.



6. Now switch to ***Code View*** and see the code under **<style>** and **</style>**. Scroll to see the style applied to this table.

Using image background for cells or tables

You can place images as a background for cells or tables. To include a image background for a cell, do the following:

1. Create a new page, save this page as ***imagetables.html*** (You need not type the extension).
2. Insert a table (minimum 2 rows and 2 columns). Place the cursor in the cell where you want the background.
3. Right-click and select ***Cell Properties***.
4. Under ***Background***, click ***Browse….***
5. Locate and select an image, click ***Open*** and then click ***OK***. Note the cell includes an image background (Figure above).
6. Save and preview this in a web browser (F12).



Working with Cell or Table Size

Usually a table spans the entire screen and that may not be appealing to the eye. Also, sometimes you may want to specify a size for a cell or table (for example, to display photos). Using MEW, you can specify the size of a cell or the table. To restrict the size of a cell, do the following:

1. Place the cursor in the cell to which you want to set a particular size. Right-click and select ***Cell Properties***. You can specify the size in pixel units or percentage.
2. Under ***Layout***, select specify ***width:*** and ***type*** 100 (In pixels).
3. Select ***specify height:*** and type 200 (In pixels) and then click ***OK***. Notice the size of the cell.

Converting Table to Text

You can also convert the contents of a table to text using the ***Table to Text*** option in HTML Editor. Explore and convert table to text and observe the changes in code.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a HTML page utilizing the Table HTML Element. Set a background image for a particular cell. Merge the first row and insert appropriate title.

ASSESSMENT

Fill in the blanks:

1. Insert table options is available under _____ menu.
2. To specify a background for a particular cell, you should use ____ .
3. Table to Text option is available in _____ under Table menu.

SESSION 6: IMAGES

Lesson Objectives:
At the end of this session, you will be able to:

- Insert and manipulate images in web pages using MEW.

RELEVANT KNOWLEDGE

As you know, it is not an easy task when you have multiple images to be placed in varying positions within a web page. HTML editors enable you to easily place images with formats such as GIF, JPEG, PNG and BMP.

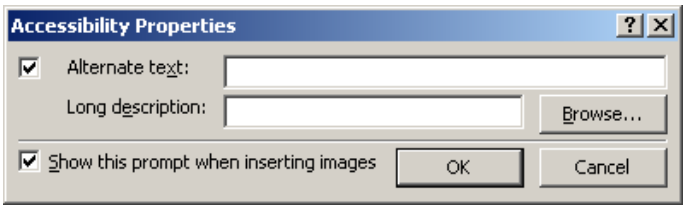
Inserting images

To insert a clipart or image, do the following:

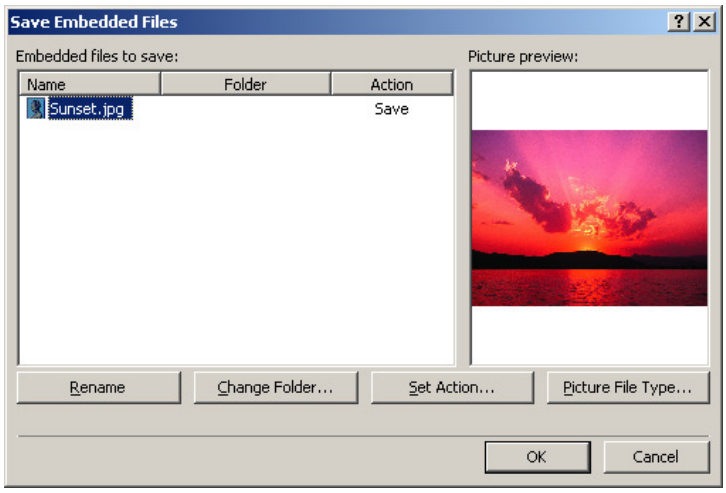
1. Create a new page, save this page as ***images.html***.
2. Select ***Insert > Picture > Picture from file…*** (figure above).



3. Browse and select a picture from your computer, Click ***Insert***. The ***Accessibility Properties*** dialog box appears (figure adjacent).



4. Specify the text (ALT attribute) in ***Alternate Text:***, for example, type ***Sample Image for Demo***. And then click ***OK***. The image is inserted in the web page!
5. Click ***Save***. A ***Save Embedded Files*** dialog box appears.



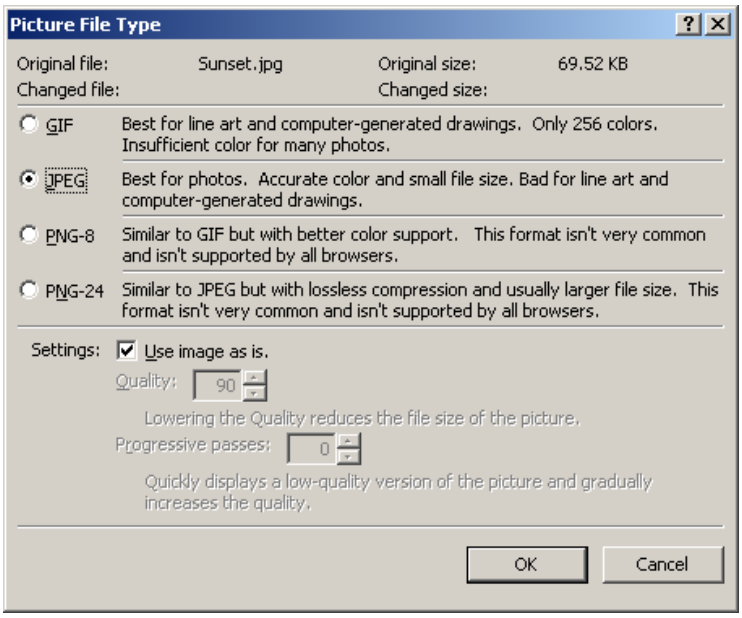
MEW saves a copy of the image within this website folder. Remember this is the website that may be published to a remote computer for visitors. The image on your computer may not be accessible to them if the HTML page and

the image are in different locations. So, you need to save the images within your website to ensure that the image stays along with the website.

HTML editor also enable you to save images in different formats. This helps when you want to change the image format to one that is suitable for websites. Also by optimizing the image size (by optimizing quality), you reduce file size resulting in faster downloads of images from your website.

To change image format and/or optimize quality, click on ***Picture File Type***….

The ***Picture File Type*** dialog box appears.



a. Select ***GIF*** if you are inserting an image with solid colors.
b. Select ***JPEG*** for high quality images such as photographs from a digital camera. The quality can be adjusted only for JPEG formats.
c. Select ***PNG-24*** if you are using illustrations or screenshots.

6. Select JPEG for this exercise. Uncheck Use image as is: and specify a value. For example, to retain 75% of the original quality, type 75 in ***Quality:*** and click ***OK*** twice.

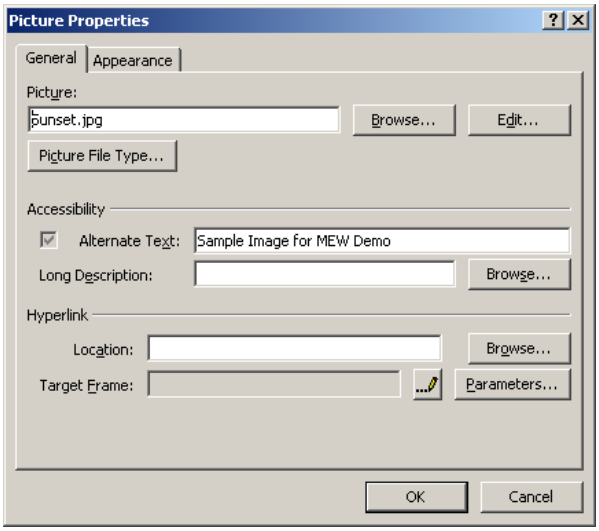
Note: If you are using image editors such as Adobe Photoshop, JPEG images are automatically optimized for quality and size. In such cases, leave the image quality as it is. Working with image formats requires special expertise, consult an expert if required.

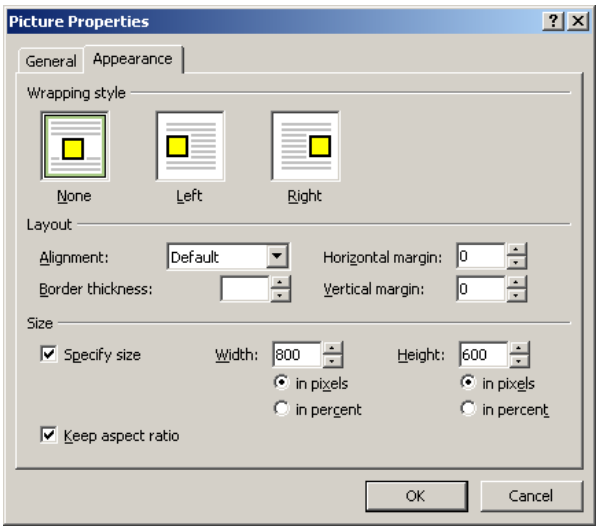
Now this image is saved within this website. Note the image file listed in the folder list. Remember, what you have here is a copy of the original image. So even if something goes wrong with image quality, size or both, you can rework again!

Changing Image properties

If you want to change properties after inserting the image, do the following:

1. Double-click on the image. You can use the ***Picture Properties*** dialog box (Figure below, left) to specify or change settings.

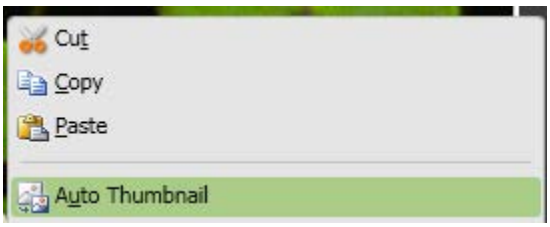




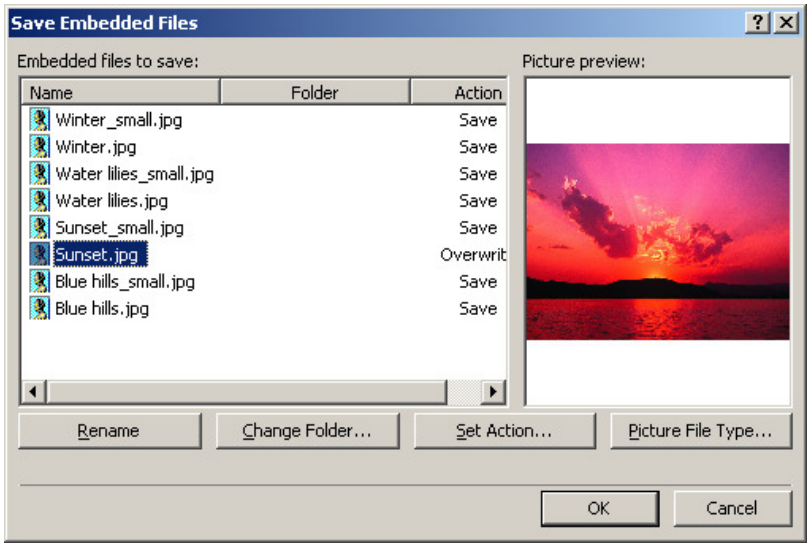
2. To change size of this image, select Appearance tab (Figure above, right).
3. To reduce the image to 50% of its original size, select ***In Percent*** and type the value 50 in both ***width:*** and ***height:*** fields. Click ***OK***. Notice the adjusted size displayed. Preview the change in a web browser (**F12**). Notice the value in alternate text is also displayed. Now switch to MEW and see the code written for this image element.

When you work with images that are relatively huge (covering the whole screen), you can make smaller versions of the image (thumbnails) which when clicked, displays the image in actual size. This helps make the website with several images look pleasant and not crowded. HTML editors have the ability to automatically create thumbnails and link them to the actual size images. To create thumbnails, do the following:

1. Create a new page, save this page as ***multipleimages.html***.
2. Select ***Insert > Picture > From File….***
3. Select multiple pictures by using ***Ctrl + Click*** (you need at least 3-4 large size pictures for this exercise).
4. Select ***Insert***. Skip providing alternate text for now, you can add it later. Click ***OK*** once for each image. Notice the size of the images.
5. Now select the image, right-click and select ***Auto Thumbnail***. Repeat the procedure for rest of the images.
6. The thumbnails are displayed in the web page. ***Click File> Save***. HTML editor again attempts to save the images and the following dialog box appears:



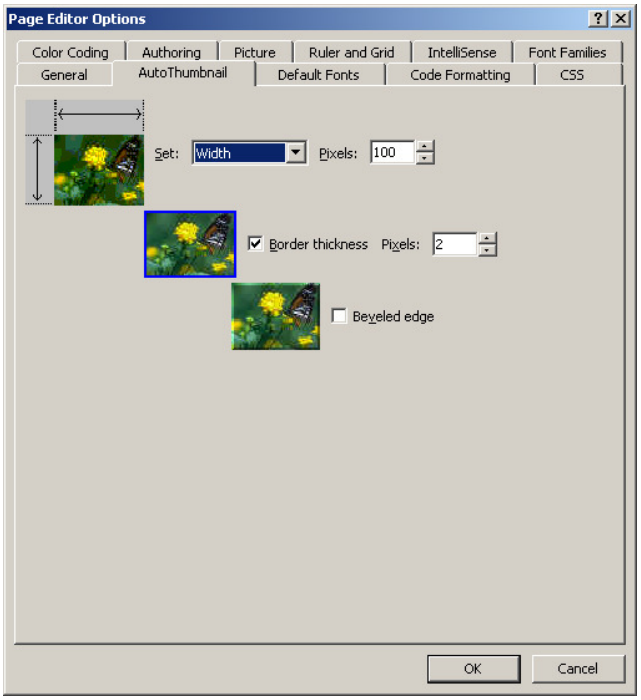
7. Note there is a set of images with *_small* added to the original filenames. These are the thumbnail versions created by the HTML editor. Click ***OK***. Now preview this web page (F12). Notice the results. *Each image is displayed as a thumbnail which when clicked displays the larger version of the image.*



8. Switch to MEW and view code.

Modifying thumbnail size

All the thumbnail images have a standard size. This is the default setting of the HTML Editor. You may need to increase the default thumbnail size if it is too small for images such as photos or if you are unable to differentiate between the small size images. To modify the thumbnail size, do the following:



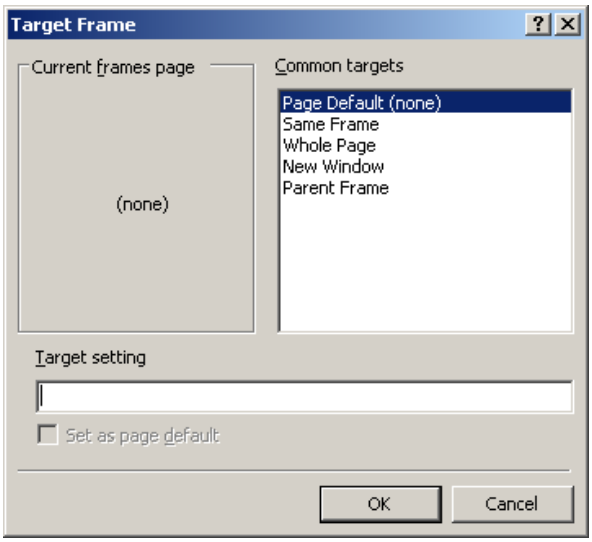
1. Select ***Tools > Page Editor Options***….
2. Select ***AutoThumbnail*** tab (Figure below). Note the default values. You can change the size by altering the values.

Once changed, thereafter, the modified size is used when you create auto thumbnails (older thumbnails will remain the same based on the original thumbnail size).

Handling large images

If large versions of many images are displayed in the same window, visitors may find it unpleasant to move back and forth to view images! As a solution, you can make the images open up in a new window. To do so:

3. Right-click a large image and select ***Picture Properties***.
4. In the ***Hyperlink*** section, select the button  next to ***Target Name…*** The ***Target frame*** dialog box appears.
5. Select ***New Window*** from the ***Common targets:*** list and cl***ick OK twic***e. Sav***e this web p***age to include the changes and preview this in browser (F12).Now click on the first thumbnail and observe the difference in behavior.
6. Switch to MEW and view code.



Aligning Images

You can also align images along with text content (similar to alignments in word processing). To align, to the following:

1. Create a new page, save this page as ***textwrap.html***.
2. Insert an image and enter some text above or below the image.
3. Select ***Image*** and right click and select ***Picture Properties***.
4. Select the ***Appearance*** tab. Then select a wrapping style to wrap text.
5. Select a value from the ***Alignment:*** dropdown (if required).
6. Specify a border for the image by entering a value in ***Border Thickness:*** field.
7. Click ***OK***. Save and preview this in your browser (**F12**). Also, see the source code for this activity.

Editing images

You can edit images using the built-in image toolbar when you want to crop an image, adjusting brightness or contrast of an image, etc. To work with an image using the image toolbar, do the following:

1. Create a new page, save this page as ***editimage.html***

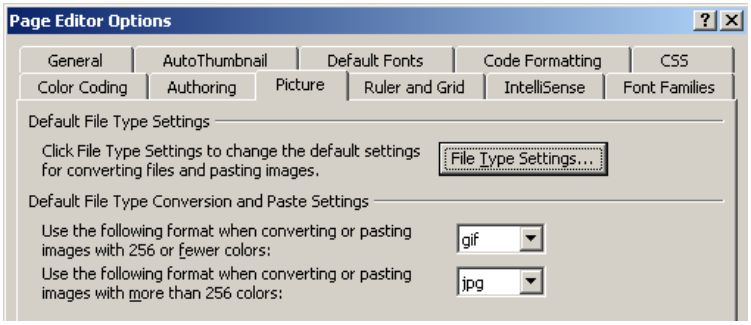
2. Insert an image and Select ***View > Toolbars > Pictures***. The ***Picture Toolbar*** will be displayed (Figure below).



3. You can use a variety of functions such as:
    a. Flip pictures using different flip options  .
    b. Increase or decrease brightness or contrast.
    c. Crop (keep only the necessary portion of a picture).
4. To crop, select the crop tool (). Now try and crop the image (same as in any other software you have worked with).
5. Save and preview this in your browser (F12). Also see the source code for this activity.

Working with image formats

When you insert images, HTML editor is configured to use GIF format for images that have 256 colors or lower and JPEG format for images that have more than 256 colors (it is intelligent!). At times, you may need to change this default behavior (to use PNG when you are creating content with mostly screenshots of products or images with focused color). To view or modify this setting, do the following:



1. Select ***Tools > Page Editor Options….*** and select the ***Picture*** tab.
2. Notic***e the values in dropdown men***us (gif and jpg). ***You ca***n change the format by selecting a image format from these dropdown menus. For example, to force the HTML editor to use PNG as the image format when images with 256 color or higher are detected, select PNG from ***Use the following format when converting or pasting images with more than 256 colors:*** dropdown menu.
3. Click ***OK***.

To test, do the following:

1. Create a new page.
2. Use *Ctrl + Print Screen* on your keyboard to take a screenshot.

3. Save the page.
4. Notice the image format displayed with the extension of PNG.

Creating and optimizing images

If you want to create, edit or optimize images, consider using professional photo editing software such as Adobe Photoshop, GIMP (Open Source), Microsoft Expression Design (Freeware), Google Picasa or Online editors such as Pixlr (www.pixlr.com).

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a HTML page by inserting images and provide an ALT text for all the images.
2.	Create a HTML page with multiple images with thumbnails and configure them to open in a separate window. Create custom thumbnail size of 50 * 50 pixels.
3.	Manipulate the picture's brightness using the Image toolbar.

ASSESSMENT

Fill in the blanks:

1. To insert a picture, you should use _____ menu.
2. When inserting multiple pictures, you should the shortcut key _____.
3. Default thumbnail size can be modified from _____ menu.
4. Image toolbar should be launched from _____ View Menu.

SESSION 7: HYPERLINKS I

Lesson Objectives:

At the end of this session, you will be able to:

- Create hyperlinks to websites
- Create hyperlinks to email addresses
- Create hyperlinks to other web pages in a website

RELEVANT KNOWLEDGE

Working with hyperlinks

It is easy to write code when you have a few embedded links. But, when there are many links to be included in a web page (image a large organization having 100's of web pages that need to be connected), it will be difficult to code manually. Here, you can use HTML editors to simplify the task.

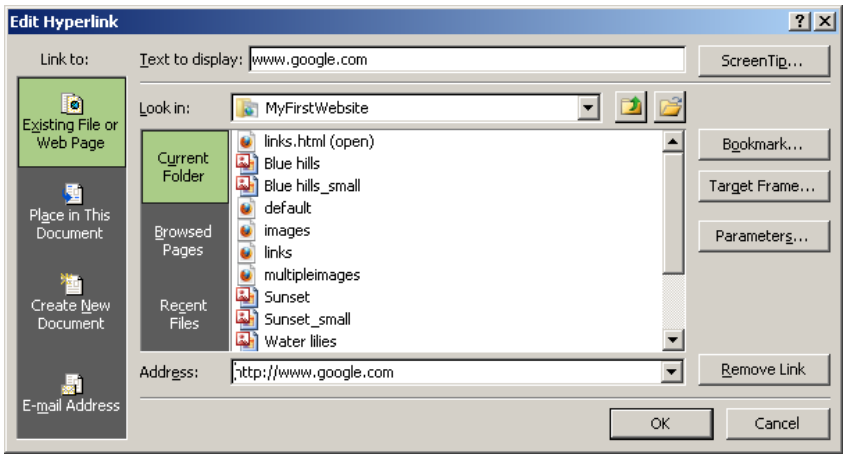
Hyperlinks to websites

To work with hyperlinks in HTML editor, do the following:

1. Create a new page, save this page as ***links.html***.
2. Type the URL, for example ***www.google.com***. Press ***Enter***. Notice the text is automatically formatted and displayed as a hyperlink.
3. Save and preview this in your browser (F12).View the source code for this activity.

If you want to change the text from URL, do the following:

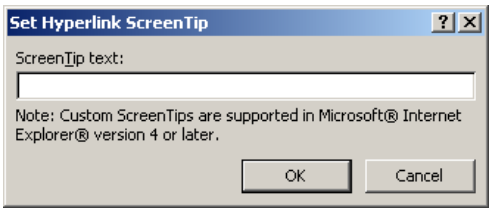
4. Switch to MEW and place the cursor on the text that has the hyperlink.
5. Right-click and select ***Hyperlink Properties….*** The ***Edit Hyperlink*** dialog box appears.
6. In the textbox ***Text to display:***, replace



www.google.com with ***Google***. Click ***OK***. Notice the text changed in the hyperlink (the link is still available).

To insert a hyperlink manually to point to Wikipedia, do the following:

1. Create a new page, save this page as ***manuallinks.html*** and place the cursor where you place the hyperlink
2. Select ***Insert > Hyperlink…***. (Or use shortcut *CTRL+K*). The ***Insert Hyperlink*** dialog box appears.
3. Enter ***Wikipedia*** in ***Text to display:*** textbox (this will be name that will be displayed).
4. To include helpful tips indicating the purpose of links which will be displayed when the cursor is placed over the hyperlink, select the ***ScreenTip…*** button. The ***Set Hyperlink ScreenTip*** dialog box appears.

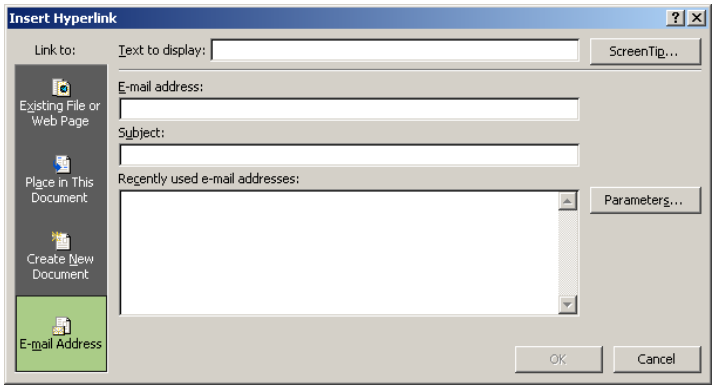


5. Type ***Use Wikipedia to learn more***. Click **OK**.
6. Type ***http://www.wikipedia.org*** in ***Address:*** and click ***OK***.

Save and preview this in your browser ***(F12)***. Observe the results (Move your mouse over the hyperlink). Switch to MEW and view code.

Hyperlinks to an email address

1. Create a new page, save this page as ***emaillink.html*** and place the cursor where you place the hyperlink.
2. Select ***Insert > Hyperlink…..***. The ***Insert Hyperlink*** dialog box appears.



3. Select ***E-mail Addresses***.
    a. Type Feedback in **Text to display:** (this will be name that will be displayed in the browser).
    b. Type an ***email address*** in ***E-Mail address:*** (for example, feedback@example.com). Notice the ***mailto:*** attribute is automatically added.

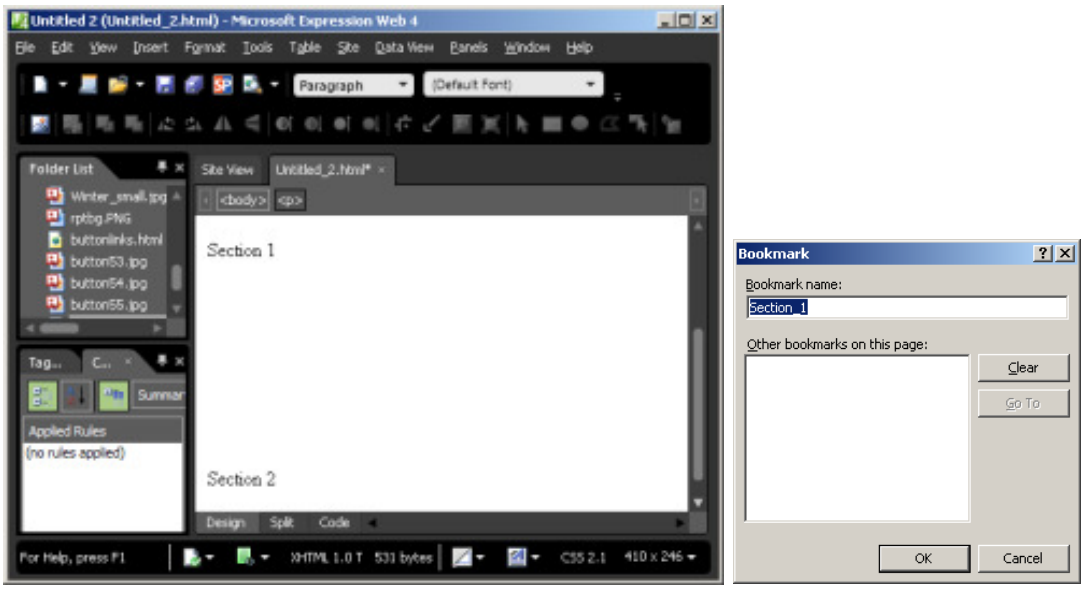
c. Type a value in ***Subject:*** (for example: Feedback for website). This helps you trace where the mail came from especially when you are using a single email address for multiple purposes. It is recommended that you use a separate email address for collecting feedback from visitors.
d. Click OK.

4. Save and preview this in your browser (F12). Notice the default email client is opened, email address and subject is automatically added leaving the email body empty for visitors to send their comments or feedback.

Link to different sections within a web page

You can link to different sections within a webpage using HTML editor. To understand the procedure, do the following:

1. Create a new page, save this page as ***sectionlinks.html***.
2. Create at least two sections in the HTML document (leave adequate space between sections, at least 10 lines between them). For example, Section 1 & Section 2 (Figure below, left).
   Note: Leave some space at the top of the page.

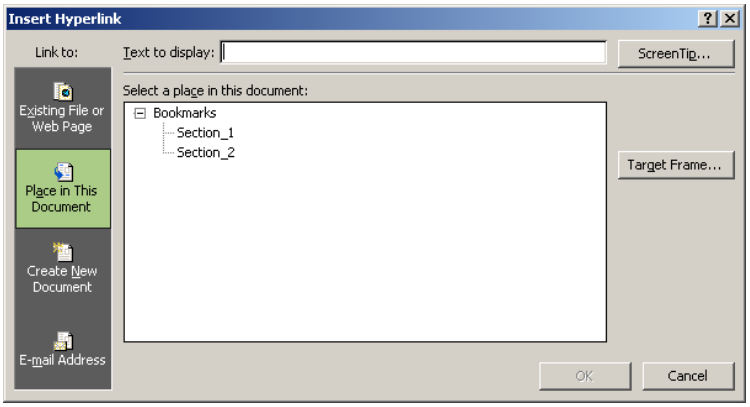


3. Select (highlight) the text Section 1. Select ***Insert > Bookmark…***. The ***Bookmark*** dialog box appears (Figure above, right).

   Notice the name in Bookmark name: list. MEW automatically creates the bookmark for you. Click ***OK***. Repeat the procedure to bookmark all sections.

4. Now scroll to the top where the links will be placed.

5. Select ***Insert > Hyperlink…***. Select ***Place in this document…*** under ***Link to:***.
6. Now type *Section 1* in ***Text to display:***. Select Section_1 under Bookmarks, Click ***OK***. (or use ***CTRL+G*** to bookmark).
7. Repeat the procedure to include hyperlink for Section 2. Save and preview this in your browser (F12). Check if the hyperlink is working by clicking on it. Switch to MEW and view code.



Note: If you notice the hyperlinks are not functional though you are following the proper procedure, it may be due to insufficient space between the main text that has hyperlinks and the sections with the page (too close to scroll up or down).

Link to another web page within a website

You can link a web page to other web pages within the site. This helps visitors view other sections of your website that may have information on products or service that you offer. To link other pages within a website, do the following:

Note: You will use the HTML files created earlier.

1. Create a new page, save this page as ***weblinks.html*** and place the cursor where you want to place the ***hyperlink***.
2. Select ***Insert > Hyperlink…***. Select ***Existing File or Web Page*** under ***Link To…***.
3. Notice the list of files displayed in your website. You can choose *ANY* file including images. To link to other web pages, you must select only web pages. Now select ***tables.html*** from this list, type ***Tables*** in ***Text to display:*** and click ***OK***.
4. Save and preview this in your browser (F12). Check if the hyperlink is working by clicking on it. Switch to MEW and view code.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create hyperlinks for at least five websites that offer free tutorials on HTML. Include your email address as hyperlinks.
2.	Create hyperlinks for the pages created in earlier sessions.

ASSESSMENT

Fill in the blanks:

1. Hyperlink option is available under _____ .
2. Shortcut key to insert a hyperlink _____ .
3. Shortcut key to bookmark a section _____.

SESSION 8: HYPERLINKS II

Lesson Objectives:
At the end of this session, you will be able to:

- Create hyperlinks using images.
- Use Interactive buttons.
- Use hotspots.

RELEVANT KNOWLEDGE

You have learnt to create hyperlinks in text in the previous session. You may have noticed websites that have images or buttons that link to other web pages or websites to make hyperlinks attractive. You can make use of the built-in facilities of MEW to use images for hyperlinks.

Hyperlink using images

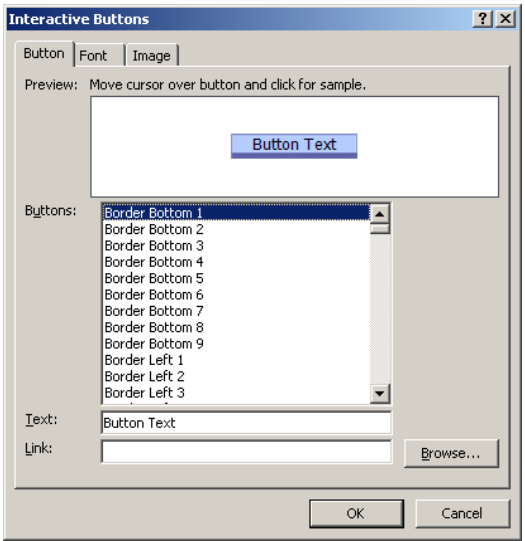
You can also create links using images enabling you to use attractive buttons or images as hyperlinks.

1. Create a new page, save this page as ***manuallinks.html***.
2. Insert an image. Select the image, select ***Insert*** > ***Hyperlink***….
3. Type ***http://www.download.com***.
4. Generally hyperlinks open within the same window which the visitor is viewing. If you do not want the visitor to leave your website, you can set the target frame property to open the hyperlink in a new tab or window. To open the hyperlink in a new window, select ***Target Frame***….
5. Select ***New Window*** and then click ***OK***.

Note: Images with hyperlinks display text such as one below (Use ***Ctrl + Click*** if you want the destination web page to open in HTML editor). This helps you to identify images with hyperlinks when you work with HTML editors.



6. Click ***OK***. Save and preview this in your browser (F12).Check if the hyperlink is working by clicking on it. Switch to MEW and view code.



Using interactive buttons

You may have noticed buttons that are used for highlighting hyperlinks in a web page; you can use the "Interactive button" feature of MEW to create such buttons and effects instead of dull boring text or heavy images.

To insert interactive buttons, do the following:

1. Create a new page, save this page as ***buttonlinks.html***.
2. Select ***Insert > Interactive Button….*** The ***Interactive Buttons*** dialog box appears.
    a. You can choose a style from **buttons:** list. For example, select ***Glass Capsule 1*** from list.
    b. Replace ***Button Text*** in ***Text:*** with a name. For example, ***Mozilla***.
    c. Type the ***URL*** in ***Link:***. For example, ***http://www.mozilla.org***.
3. Click ***OK***. Save and preview this in your browser (F12). *Note:* You need click OK every time you are prompted, to save the images.
4. Check if the hyperlink is working by clicking on it. Switch to MEW and view code.

Use Hotspots

Image hotspots refer to using portions of a single image to point to a different web page or a link. For example, you can include a world map as a picture and link parts of the same image to different web pages that may have separate content for each continent or a country.

Hyperlinks can be used on portions of a single image thereby creating clickable hotspots, when you want to link portions of the image to resources such as to a web page, website or email address. To create hotspots, do the following:

1. Create a new page, save this page as ***hotspots.html***.
2. Insert an image (use an image that can be used for pointing out different portions such as world map that has continents).
3. Select ***View > Toolbars > Pictures***. Picture toolbar appears (Figure below).



Note: Move your cursor over each icon to understand the purpose of each item.

4. Select ***Rectangular Hotspot***  from Pictures Toolbar. Place the cursor (displayed like a pencil), drag over a particular area to draw a square or rectangle (this entire area will become a hyperlink).

5. Once complete, the ***Insert Hyperlink*** dialog box will be displayed.
6. Type the URL in the ***Address:*** and Click ***OK***.
7. Save and preview this in your browser (F12). Check if the hyperlink is working by clicking on it. Switch to MEW and view code.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a html page and insert different images. Create hyperlinks for images to launch different websites in new window.
2.	Create a html page with relevant image on any of the following topics: a. Anatomy of human brain b. Anatomy of human body c. Parts of Bulb d. Parts of a computer e. Anatomy of a flower. Use image hotspot to provide hyperlinks to articles on the Internet such as a page in Wikipedia about each section.
3.	Create navigation menu for all pages in the website using Interactive buttons. Name the buttons accordingly (Hint: For homepage, use HOME).

ASSESSMENT

Fill in the blanks:

1. Interactive buttons can be inserted from _____ Menu.
2. Image hotspots can be created using _____ toolbar.

SESSION 9: AUDIO AND VIDEO

Lesson Objectives:
At the end of this session, you will be able to:

- Include audio and video content in a web page using MEW.
- Insert Flash files or movies in a web page.
- Include Silverlight content in a web page.

RELEVANT KNOWLEDGE

You have learnt to include audio & video content in the HTML module. You can also use HTML editor to include audio & video content.

Note: You can also use HTML 5 audio & video elements. Use Code View to insert the code. Also keep samples of audio and video clips ready for these exercises.

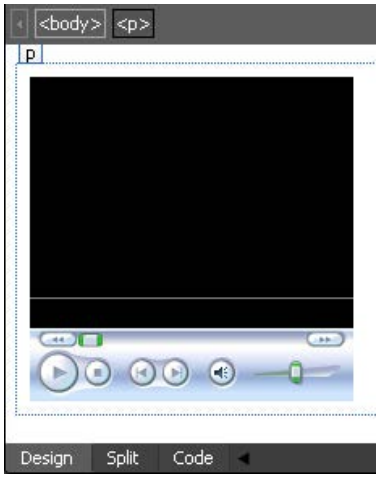
Including audio and video content

To include an audio clip, do the following:

1. Create a new page, save this page as ***audio.html***. Place the cursor where you place the audio player control.
2. Select ***Insert > Media > Windows Media Player***….

   Note: MEW by default lists only files that are associated with Windows Media file types. Select ***All files*** from ***Files of Type:*** dropdown.

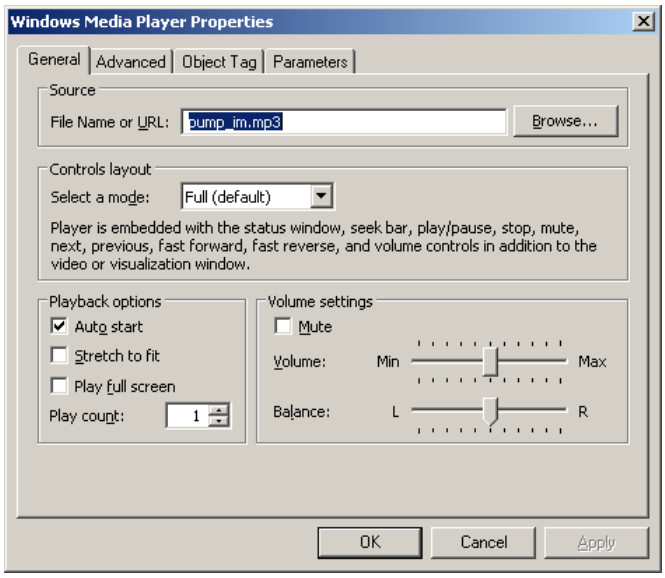
3. Select the audio clip, for example: sample.mp3. Click ***Insert***.
4. Click ***Save*** (Save this audio clip with your website when prompted). Notice the result displayed in MEW (Figure adjacent).
5. Save and preview this in your browser (F12).



   Note: Audio clip by default plays automatically when the page is accessed.

If you want to customize the settings for this audio clip, do the following:

6. Switch to MEW and double-click the ***Windows Media Player Control***. The ***Windows Media Player Properties*** dialog box appears. Note the available controls (Figure adjacent).



7. For the content to play, CODEC (a software component required for playback) must be available on the visitor's computer and if it is not available, you can include the source using CODEBASE attribute. Visitor's browser will download the CODEC from the URL specified in CODEBASE: attribute of Object element, install and play the content automatically.

   Note: Refer to respective website for correct URL. Some of the common URL's are provided here for your reference:

Type of Content	Download Location
QuickTime (WAV)	http://www.apple.com/qtactivex/qtplugin.cab
QuickTime (MP4)	http://www.apple.com/qtactivex/qtplugin.cab
Flash (SWF)	http://fpdownload.macromedia.com/pub/shockwave/cabs/flash/swflash.cab#version=8,0,0,0

8. Repeat the procedure for including video clips. Save and preview this in your browser (F12). Switch to MEW and view code.

Inserting a Flash animation

If you want to include a flash animation, do the following:

1. Create a new page, save this page as ***flash.html***.
2. Place the cursor where you place the flash animation. Select ***Insert > Media > Flash Movie….***
3. Locate and select the flash animation (file with .swf extensions), select ***Insert***.
4. Save and preview this in your browser (F12). Switch to MEW and view code.

If you want to include videos, for example, from Youtube.com, do the following:

1. Create a new page, save this page as ***Youtube.html***.
2. Place the cursor where you place the Youtube video.

Note: You need to follow the procedure before you insert videos from Youtube.

   a. Go to Youtube.com.
   b. Select a video clip.
   c. Right-click on the video and select ***copy embed html***.

3. Select ***View > Page > Code***.
4. Paste the code (example: <iframe width="640" height="360" src="http://www.youtube.com/embed/ieM93xFIGCc?feature=player_detailpage" frameborder="0" allowfullscreen></iframe>)
5. Save and preview this in your browser (F12). Switch to MEW and view code.

   Note*: You need to have an active Internet connection for this exercise*.

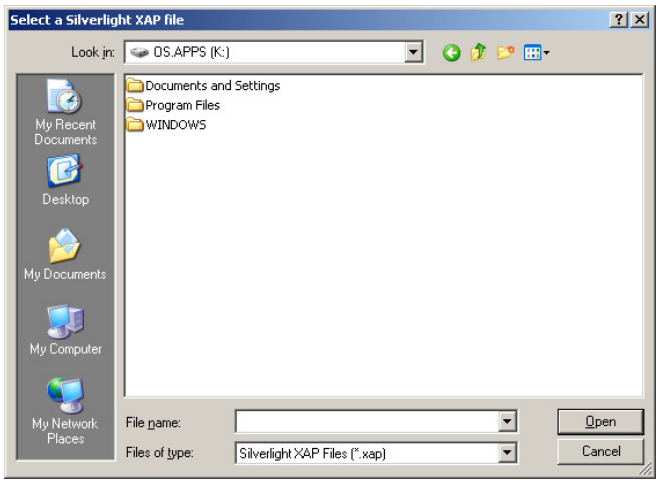
Including Silverlight content

Silverlight is an application framework for writing rich internet applications similar to that the ones created using Adobe Flash. Rich internet applications are web applications that look and work similar to that of standard desktop applications such as accounting software, word processing software, image manipulation software, etc. Silverlight content is played using Silverlight plug-in a free download.

Note: Silverlight content can be played only on Microsoft Windows operating systems, MAC OS and Symbian OS. You can use Moonlight, a free plug-in to view content on Linux based computers.

If you want to include Silverlight content on your page, do the following:

1. Create a new page, save this page as ***silverlight.html***.
2. Place the cursor where you place the Silverlight content. Select ***Insert > Media > Silverlight***. The ***Select a Silverlight XAP file*** dialog box appears.
3. Silverlight files have the extension .XAP. Browse and select the file and then select ***Open***.



4. Save and preview this in your browser (F12). Notice the Silverlight content displayed in the browser (if the plug-in is available). Switch to MEW and view code.

You can use products such as Powerlight Converter, PPTX2SilverLightConverter, etc. to convert a presentation to simple Silverlight content.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Insert relevant audio & video clips with a variety of file formats for the website created in earlier sessions.
2.	Create a web page and include videos from YouTube. Collect and present links related to learning HTML, CSS, Expression Web, XML, XHTML and JavaScript.

ASSESSMENT

Fill in the blanks:

1. Media Player control should be inserted from _____ dropdown menu of _____ Menu.
2. Flash content should be inserted using _____ option from _____ dropdown menu of _____ Menu.

SESSION 10: FRAMES, INLINE FRAMES AND LAYERS

Lesson Objectives:

At the end of this session, you will be able to:

- Use frames, inline frames and layers.

RELEVANT KNOWLEDGE

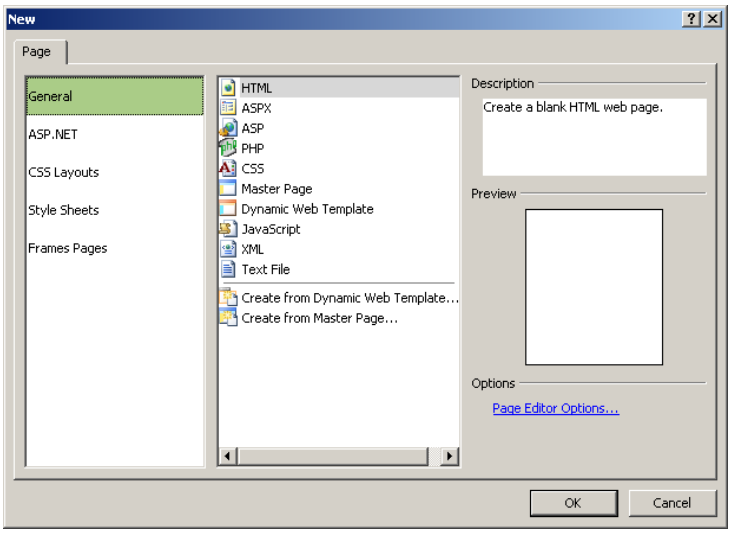
You have learnt to use frames, inline frames in HTML module. Frames are used to display one or more pages within a single web page; collections of different frames are referred to as a frameset. Frames are used to display different pages as a single page in a web browser. You can use the capabilities of MEW to include frames and inline frames in a web page.

Frames

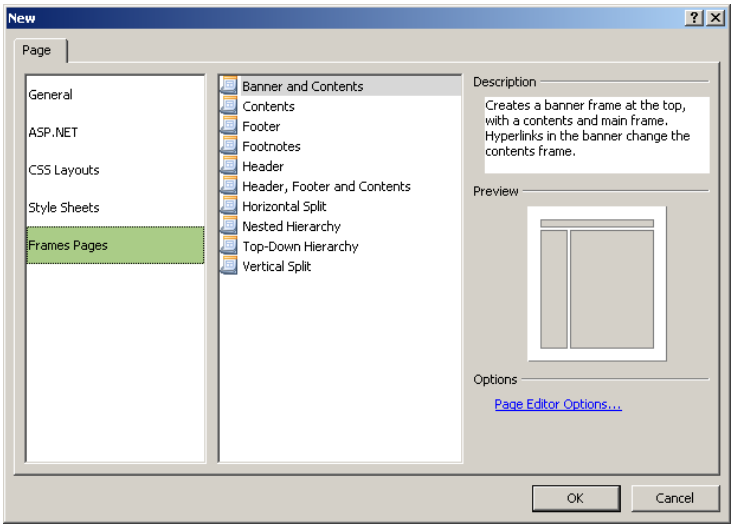
You have learnt to use frames using HTML code. MEW includes few frame styles that you can use right out of the box.

To create a web page using built-in frames, do the following:

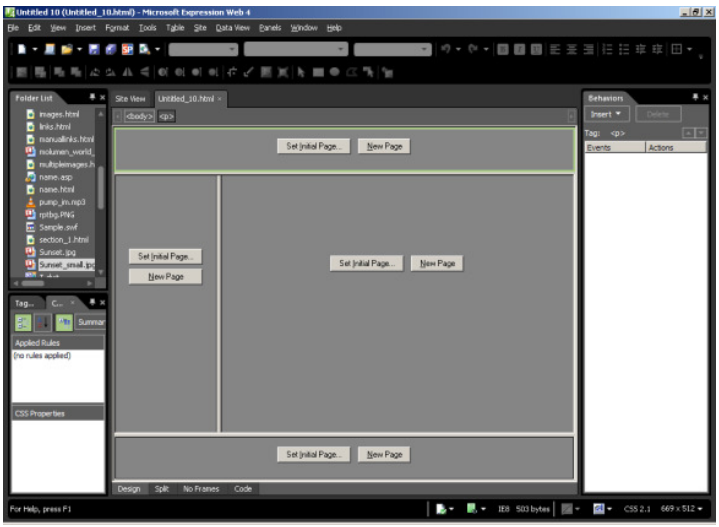
1. Select ***File > New > Page***….
2. Select ***Frames Pages***. A list of frames with different styles is displayed.
3. Select ***Header, Footer and Contents*** from the list and Click ***OK***. Notice the results displayed.
4. If you want to use the existing HTML files, select ***Set Initial Page***…. Select any of the HTML pages created in earlier activities and click ***OK***.



5. If you want the HTML editor to create a new page for rest of the frames, select ***New Page….***
6. Select ***File > Save (CTRL+S)***. You will have to save each new page that is a part of this frame. Preview this in your browser (F12). Switch to MEW and view code.



If you want to edit or work with individual web page in a frame, it is recommended to open each file separately (open by the file name from the folder list). Once complete, open the ***frames.html*** in the HTML editor or web browser.



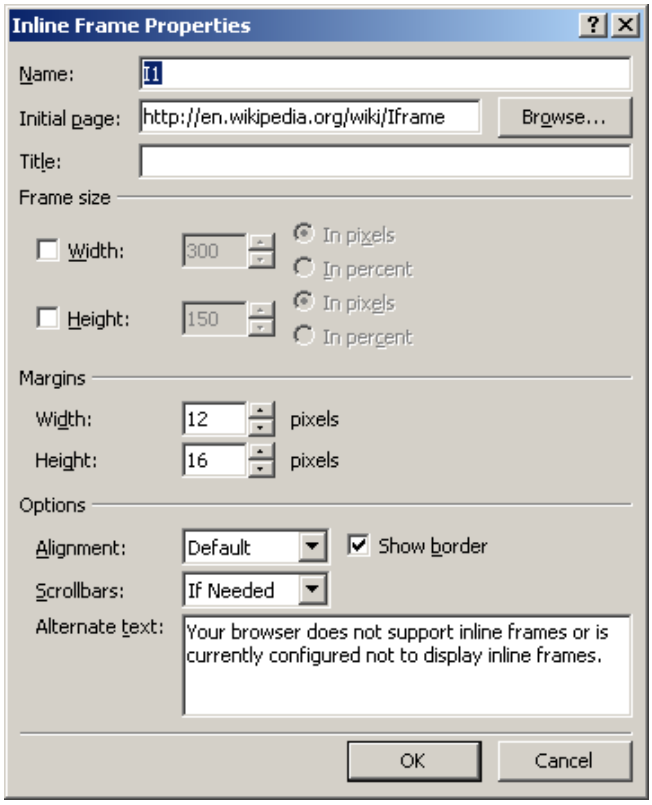
iframe

You have learnt to use iframes using HTML code. You can also create iframes using MEW with minimum efforts. To insert an iframe, do the following:

1. Create a new page, save this page as ***iframe.html***.
2. Place the cursor where you want the new iframe to be placed. ***Select Insert > HTML > Inline Frame***. Notice a new frame is inserted within this page.
3. Select ***Set Initial Page….*** Type ***http://en.wikipedia.org/wiki/Iframe*** in ***Address:*** and click ***OK***.



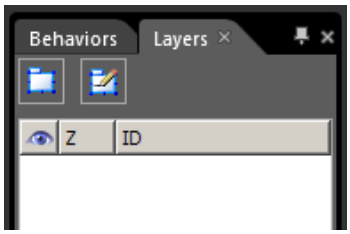
4. Save and preview this in your browser (F12). Switch to MEW and view code.



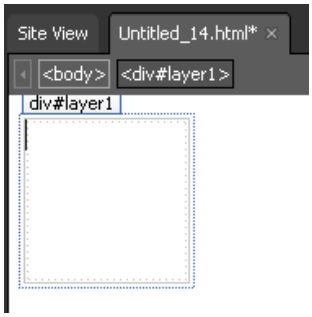
To modify the appearance of an iframe, select the iframe and double-click on it. The ***Inline Frame Properties*** dialog box appears wherein you can modify the size, include margins, align text, disable scrollbar or provide alternate text.

Layers

Layers are advanced techniques that you use to float content on top of other content in a web page. You use this when you want to include a popup registration form or menus when a visitor views a web page. Layers can also help in keep content such as image or dropdown menus fixed in a particular position in a web page. Layers are managed using a special element called DIV. To insert layers, do the following:



1. Create a new page, save this page as ***layers.html***.
2. Select ***Format > Layers***. The ***Layer Toolbar*** appears.
3. From the toolbar, select ***Insert Layer***  . A new layer is inserted similar to the one below.
4. You can increase or dec***rease the si***ze of this layer by selecting the layer box and drag around the corner. To place this elsewhere, simply drag the entire layer box.
5. Now insert an image in this layer:
    a. Place the cursor inside the layer. Select ***Insert > Picture > From File…***
    b. Locate and Insert the image. Notice the picture is within the layer.



6. Now type some content in the web page. Notice the image present in the layer does not move along with the content and stays in the position that you fixed.

7. Save and preview this in your browser (F12). Switch to MEW and view code.

Note: Layers are an advanced concept and require additional practice to understand.

You can place multiple layers on top of each other (Figure below).



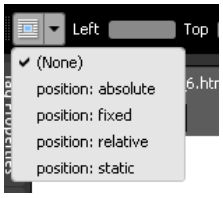
This is done by inserting and positioning additional layers. Use the **Layer** toolbar to insert additional layers.

To use the toolbar to position layers, do the following:

1. Select ***View*** **>** ***Toolbar*** **>** ***Positioning***.



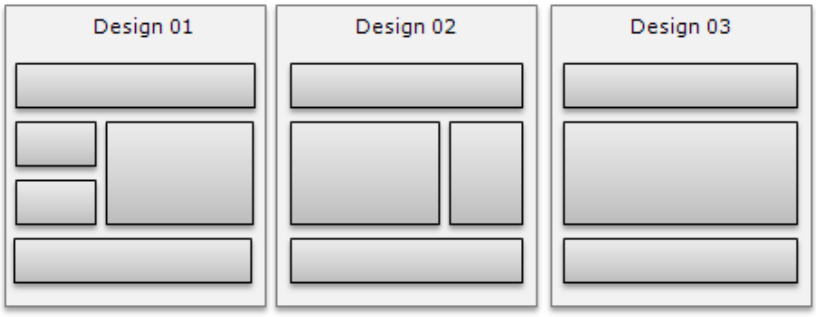
2. Insert an HTML element in the body, for example: a table with 2 rows and 3 columns and select the Table.
3. Select ***position: fixed*** from the dropdown.
4. Notice the values in positioning toolbar indicated in pixels.
5. Now try typing content in this web page. Notice the table is in a fixed position.



Note: It will take a while to work with positioning and particularly CSS. Use help file and search engines for more examples.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a web page with three frames to represent the following designs:  Link to existing pages created in earlier sessions.
2.	Create a web page with inline frame to point to different websites.
3.	Create at least 3 overlapping layers and include picture in each layer.

ASSESSMENT

Fill in the blanks:

1. Frame page should be created from _____ menu.
2. iframe should be inserted from _____ dropdown of _____ menu.
3. Layer toolbar can be accessed from _____ menu.

SESSION 11: HOVER EFFECT, META ELEMENTS & WATERMARK

Lesson Objectives:

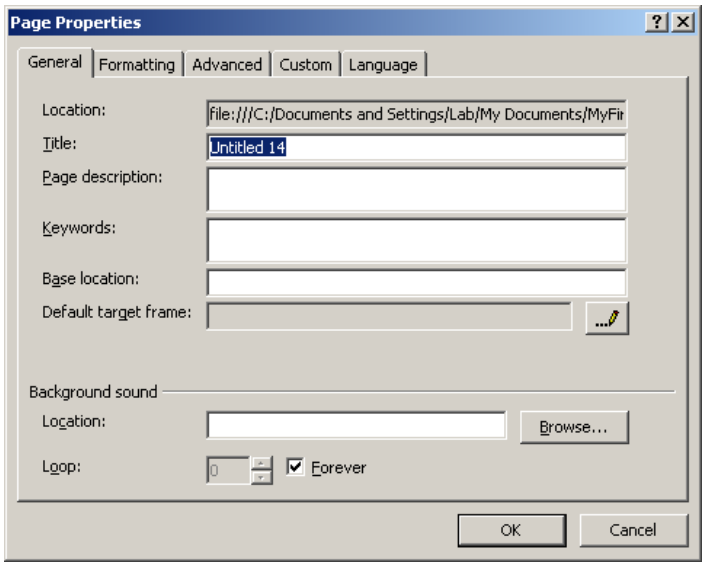
At the end of this session, you will be able to:

- Use meta elements in a web page.
- Use hover effects in a web page.
- Use Watermark in a web page.

RELEVANT KNOWLEDGE

You have learnt to use HTML elements and attributes such as Title, Description, keywords, etc. using HTML code. You can also use the HTML editor to include such elements easily. Note that the settings modified here apply only to the current page.

1. Create a new page, save this page as ***meta.html***.
2. Right-click on the body, select ***Page Properties***. The ***Page Properties*** dialog box appears.

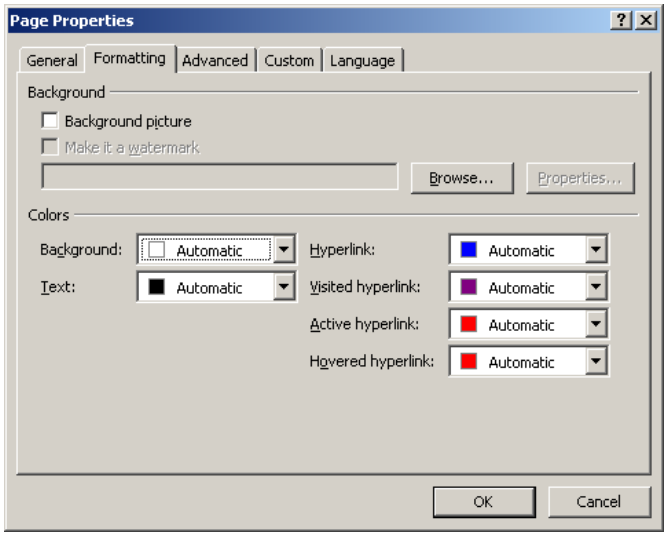


3. You can specify the *Title* in the ***Title:*** text box. Enter details about the website in ***Page Description:*** textbox and use keywords for this website using the ***Keywords:*** textbox. Now type:
    a. *Webpage created using HTML editor* in ***Title:***
    b. *We offer great web designs* in ***Page Description:***
    c. Type *Web Page Development, Web Design, Website Development* in ***Keywords:***
    d. Click ***OK***.
4. Save and preview this in your browser (F12). Switch to MEW and view code.

Notice the HTML elements and content inside elements have been created automatically by MEW!

Modifying background

You can also specify a color or image background for a web page. To set a background color, do the following:



1. Select ***View*** > ***Page*** > ***Design***.
2. Right-click on the body and select ***Page Properties***.
3. Select the ***Formatting*** tab.
4. In the ***Colors*** section, select ***Silver*** from the ***Background:*** dropdown menu.
5. Click ***OK***.
6. Save and preview this in your browser (F12). Switch to MEW and view code.

Modifying appearance of links

You can also modify how links appear in a web page. To apply hover effects, do the following:

1. Create a new page, save this page as ***hover.html***. Insert at least two or three hyperlinks.
2. Right-click on the body, select ***Page Properties***. Select ***Formatting*** tab.
3. Select the following values in the ***Colors:*** section:
    a. ***Green*** for ***Hyperlink:***.
    b. ***Silver*** for ***Visited Hyperlink:***.
    c. ***Maroon*** for ***Active Hyperlink:***.
    d. ***Teal*** for ***Hovered Hyperlink:***.
4. Click ***OK***. Save and preview this in your browser (F12). Switch to MEW and view code.

Inserting a watermark

You can include a watermark for a web page when you want to inform visitors that you are still testing the website or it is under development. To include a watermark, do the following:

1. Create a new page, save this page as ***watermark.html***.
2. Right-click on the body, select ***Page Properties***. Select the ***Formatting*** tab.

3. Select ***Background Picture*** under ***Background***. Click ***browse:***, select the image you want as a watermark and then click ***OK***.
4. Check ***Make it a Watermark*** and click ***OK***.
5. Type some content in the webpage (at least one or two pages in length).
6. Save and preview this in your browser (F12). Now scroll down the page and notice the background is in fixed position and does not move along with content. Switch to MEW and view code.

Changing the margins

You can also adjust the margins of a web page while designing the page. Doing so leaves some space on either sides of a webpage where you may want to place advertisements later on. To adjust the margin, do the following:

1. Create a new page, save this page as ***margin.html***.
2. Right-click on the body, select ***Page Properties***. Select ***Advanced*** tab.
3. To specify the margin size (in pixel units), type:
    a. ***30*** in ***Top Margin:***.
    b. ***60*** in ***Left Margin:***.
    c. ***60*** in ***Right Margin:***.
    d. ***30*** in ***bottom Margin:***.
4. Type some content. Save and preview this in your browser (F12). Switch to MEW and view code.

Specifying the language

You can also specify the language the web page is created with. This information is used by search engines to index and display language specific results to visitors, by screen reader software to understand the language of the content used in a web page, by automated translation tools that translate web pages from one language to another and so on. To specify a language, do the following:

1. Create a new page, save this page as ***lang.html***.
2. Right-click on the body, select ***Page Properties***. Select ***Language*** tab.
3. Select ***English (India)*** under ***Mark current document as:*** dropdown menu.
4. Click ***OK***. Save and preview this in your browser (F12). Switch to MEW and view code.

Note: You may not notice any visual difference in web page as this is used only by search engines, screen readers or browsers for internal use.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Include meta elements such as title, description and keyword for web pages created earlier.
2.	Include a picture as a watermark.
3.	Create hover effect: a. ***Dark Blue*** for ***Hyperlink:***. b. ***Dark Green*** for ***Visited Hyperlink:***. c. ***Black*** for ***Active Hyperlink:***. d. ***Teal*** for ***Hovered Hyperlink:***.
4.	Set margins: a. ***10*** in ***Top Margin:***. b. ***10*** in ***Left Margin:***. c. ***10*** in ***Right Margin:***. d. ***10*** in ***bottom Margin:***.

ASSESSMENT

Fill in the blanks:

1. Meta elements can be inserted through ____ options.
2. _____ should be checked under background if you want to use a picture as a watermark.

SESSION 12: FORMS

Lesson Objectives:
At the end of this session, you will be able to:

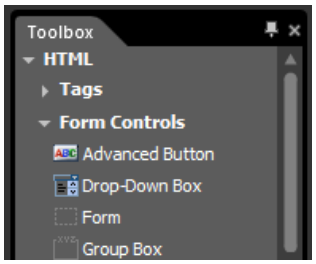
- Create forms.

RELEVANT KNOWLEDGE

You have learnt to create forms using HTML code. As you are aware, forms are used for collecting information from visitors or for displaying relevant results to visitor. You can include forms in a website using the HTML editor.

Creating forms

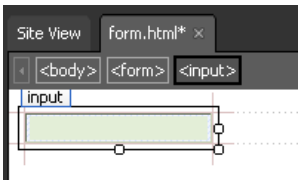
To create a simple HTML form, do the following:

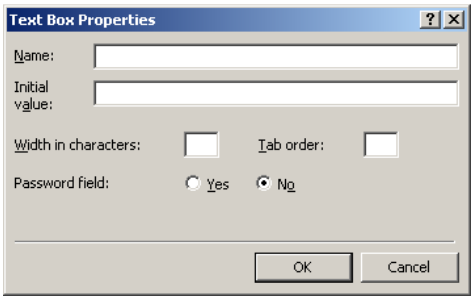


1. Create a new page, save this page as ***form.html***.
2. Select ***Insert > HTML > More HTML Tags….*** The ***HTML Toolbox*** is displayed, scroll down and expand ***Form Controls*** (Figure adjacent).
3. To create a form, first you need to add the form control. To add the form control, select ***Form*** Form from the ***Form Controls*** list.
4. Click and drag Form from the toolbox to the web page where you want to place the form.

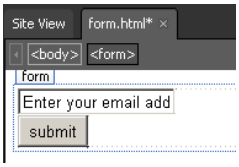
You need to add elements to make this form functional. There are a variety of form controls available with this HTML Editor. For example you can use textbox element to collect a visitor's email address.

5. Select ***Input (Text)*** from Form Control List. Drag and drop it inside the form area (Figure below, left).

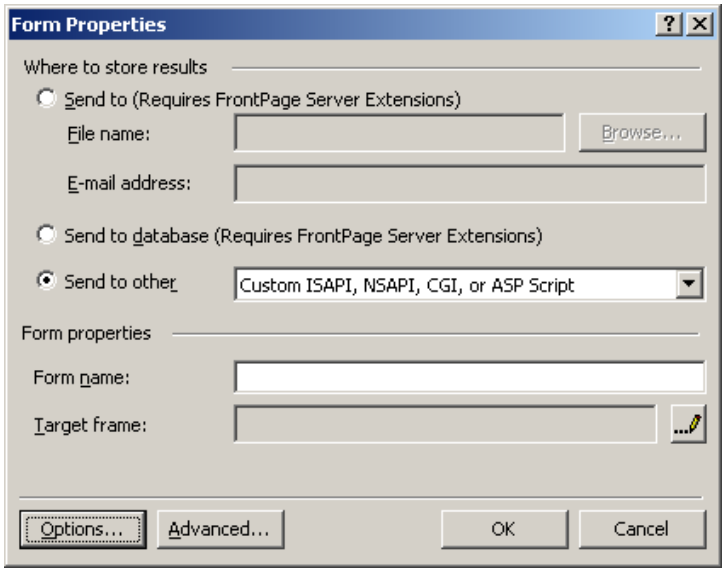




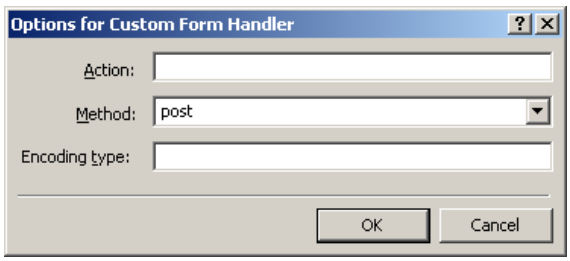
6. You need to indicate the user the purpose of this field. You can do that by double-clicking on an element. Double-click the ***Input (Text)*** field that you just inserted. ***Text Box Properties*** dialog box appears (Figure above, right).
    a. If you have multiple fields in a form, they will be easy to locate and understand if you have friendly names assigned to it. To add a name, type ***Email*** in ***Name:***.
    b. To indicate the purpose of this field, type a value in ***Initial Value:*** field. This will be displayed initially but can be replaced by visitor's email address. Type ***Enter your email address*** in ***Initial Value:*** field.
    c. Click ***OK***.
7. Press ***Enter*** to move to the next line.



8. You need to add a control for this form to be submitted. You should use the ***Input (Submit)*** control from the ***Form Control List***. Select ***Input (Submit)*** from the list, drag and place it below the ***Input (Text)*** field inserted earlier. Now your form will start to look like the one adjacent.



9. Now this form needs to be configured. To send the form details for further processing, after the visitor enters the email address, you need to specify the URL where the details should be sent. Now right click the form, select ***Form Properties***. The ***Form Properties*** dialog box will be displayed (Figure adjacent).
    a. Select ***Options…***. The ***Options for Custom Form Handler*** dialog box appears.
        i. You need to specify the URL in the text box ***Action:*** for the details to be sent to a script that will take care of further execution. Type a URL, for example: ***http://www.example.com/submit.asp*** or ***submit.asp***.



ii. You need to specify a method. Since we are sending data, select ***POST***.
iii. Click ***OK***.

10. Give a relevant name to this form that helps track different forms used in a website. In this activity, type ***Newsletter*** and click ***OK***.
11. Save and preview this in your browser (F12). Switch to MEW and view code.

Note: You need to point to the URL that has the script to process this form further. If you have provided values just for demo, your form will NOT work. However, you can understand the concept behind HTML form.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a form to collect the First name, Last name, Email address, Date of birth and Favorite book genre (Science, Science Fiction, Statistics) of visitors as single selection.

ASSESSMENT

Fill in the blanks:

1. Form elements are available in _____.
2. _____ control should be used for password fields in a form.
3. To create a dropdown list, _____ control should be used.
4. To provide description inside a form, _____ control should be used.

SESSION 13: CSS

Lesson Objectives:

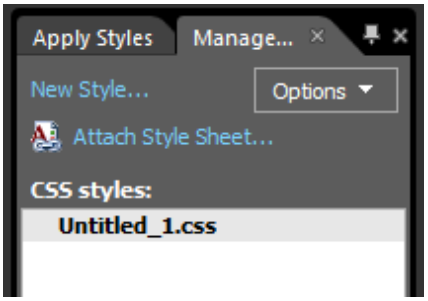
At the end of this session, you will be able to:

- Create Style Sheets (CSS).
- Apply a style sheet across a website.
- Apply CSS code to a single page.

RELEVANT KNOWLEDGE

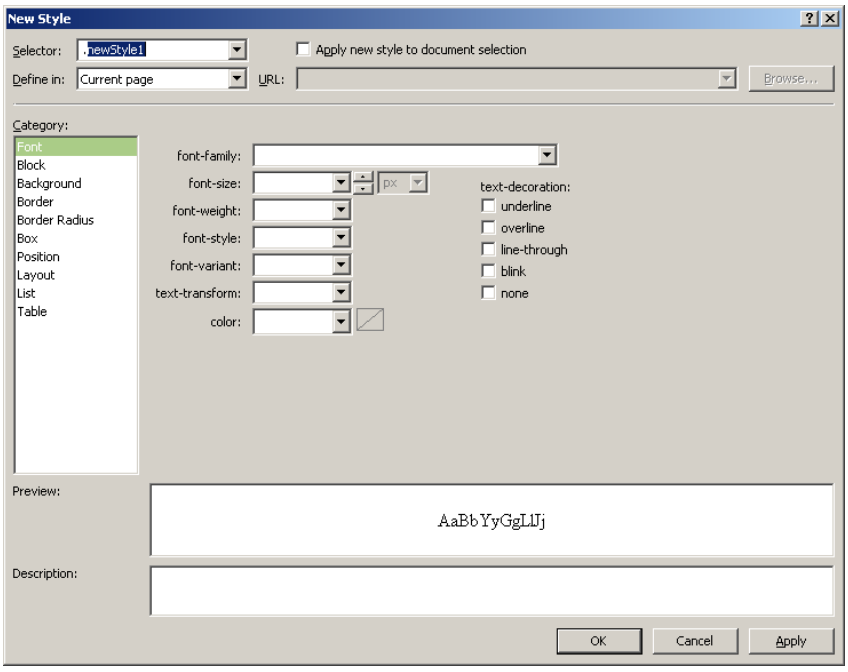
If you have noticed HTML code is complimented using CSS. HTML Editor uses CSS for presentation to align your website to certain standards as set by W3C.

Create a style sheet to be used across a website

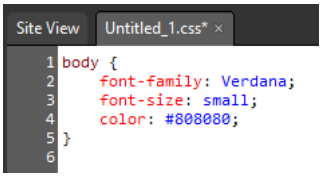


You can also create style sheets that could be applied across an entire website. You have learnt to create style sheets manually in CSS Module. You can use MEW to create style sheets using the following procedure:

1. Select ***File*** > ***New*** > ***CSS***.
2. You can use the **Style** toolbox (Figure adjacent) to create styles in the style sheet. (If it is not visible, select ***Panels*** > ***Apply Styles***….).
3. Select ***New Style***…. The ***New Style*** dialog box appears (Figure adjacent).
4. You can define styles for each HTML element using the ***Selector:*** dropdown menu.
    a. For example to apply a particular setting for body HTML element,



i. Select ***body*** from ***Selector:*** dropdown menu.
ii. Select ***Verdana*** from ***font-family:*** dropdown menu.
iii. Select ***small*** from ***font-size:*** dropdown menu.
iv. Select ***Gray*** from ***Color:*** dropdown menu.
v. Click ***OK***.
vi. Notice the CSS code written automatically (figure above)



b. To apply a particular setting for Table element, select ***New Style….***
i. Select ***Table*** from ***Selector:*** dropdown menu.
ii. Select ***Courier*** from ***font-family:*** dropdown menu.
iii. Select ***x-small*** from ***font-size:*** dropdown menu.
iv. Select ***Gray*** from ***Color:*** dropdown menu.
v. Click ***OK***.
vi. Notice the CSS code written automatically (Figure above)

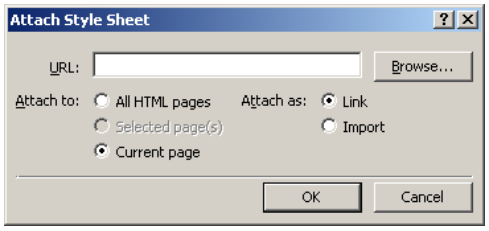


Note that the code is appended to the existing code. This is helpful when you want to modify an existing style sheet.

5. Save this file with a file name, for example, ***mystyle.css*** (You need not type the file extension).

Apply a style sheet across a website

Now you need to link all the web pages in the website to this style sheet. This is usually done by including this style between ***<style>*** and ***</style>*** elements in each page. HTML Editor can add that code for you.
To apply this style sheet to all the web pages in a website, do the following:



1. Select ***Attach Style Sheet…*** under ***Apply Styles***. The ***Attach Style Sheet*** dialog box is displayed (Figure adjacent).
2. Select ***All HTML Pages*** in ***Attach to:*** option. You can either include the CSS code to all the pages or link all the pages to use the CSS code in this style

sheet. It is highly recommended and considered best practice to link style sheet as:

   a. You have a better control of the whole site via a single style sheet.
   b. Change of the settings in one style sheet is automatically applied to all the web pages linked to the style sheet.

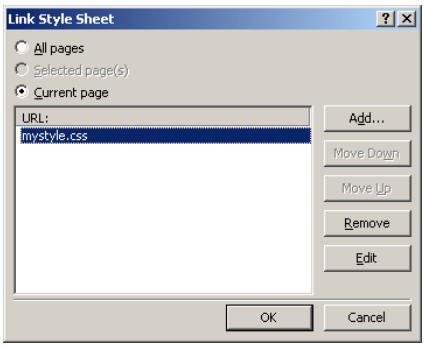
3. Select ***Link***.
4. Select ***browse***…. Select the style sheet you created earlier (***mystyle.css)*** and click ***OK***.

Note: Linking all the web pages may take a while depending on the number of web pages in the website. Notice the popup message once complete.

5. To verify if the link is added, open any HTML page in this website. Select ***View > Page > Code***. Notice the link to ***mystyle.css*** within the ***<head>*** and ***</head>*** elements.

Removing Style Sheet Links

To remove style sheet links from a single web page, remove the line that contains code for linking to a style sheet. To remove style sheet links for all web pages, open any web page that has the link to a style sheet and do the following:



1. Select ***Panels > Manage Styles***….
2. Select the Style Sheet listed under ***CSS Styles:***.
3. Right-click and Select ***Manage Style Sheet Links***…. The ***Link Style Sheet*** dialog box appears (Figure adjacent).
4. Select ***All Pages***.
5. Select the Style Sheet from the ***URL:*** list.
6. Select ***Remove***.
7. Click ***OK***.
8. Click ***Continue***.

Now the links will be automatically removed from all the web pages.

Use CSS code for a single page

You can also use CSS for a specific web page when you want to use a separate style for that particular web page only. To specific CSS for a specific page, do the following:

1. Create a new page, name it ***single.html***.
2. Select ***Format > New Style…***. The ***New Style*** dialog box appears.
    a. Select ***Paragraph*** element from ***Selector:*** dropdown list.
    b. Select ***Book Antiqua*** from ***font-family:*** dropdown menu.
    c. Select ***medium*** from ***font-size:*** dropdown menu.
    d. Select ***Lime*** from ***Color:*** dropdown menu.
    e. Click ***OK***.



3. Select ***View > Page > Code***. Notice the CSS code included only for this web page.
4. Create some content using paragraph element. Save and preview this in your browser (F12).

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a style sheet and define the following elements: • Body - background color - light grey • Paragraph - left aligned, Times New roman font, size 12pt • Table - Border color - Green, thickness 3 pt • Heading 1 - Center aligned, Times New roman font, size 20pt • Heading 2 - left aligned, Tahoma font, size 16pt • Heading 3 - left aligned, Georgia as font, size 14pt Apply this to all the web pages in a website.
2.	Create a style sheet and define the following elements: • Body background color – Dark Grey • Heading 1 – Left Aligned, Century Gothic, size 18 pt • Heading 2 – Left Aligned, Century Gothic, size 16 pt • Heading 3 – Left Aligned, Century Gothic, size 12 pt • Paragraph – Left Aligned, Verdana, Size 10 pt Apply this only to the home page.

ASSESSMENT

Fill in the blanks:

1. External style sheets should be created from _____ menu.
2. Style sheets should be linked using _____ attribute.

SESSION 14: BEHAVIORS

Lesson Objectives:
At the end of this session, you will be able to:

- Work with behaviors.

RELEVANT KNOWLEDGE

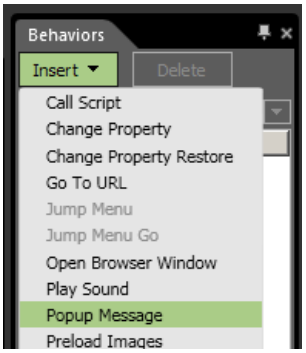
Behaviors are pre-defined scripts that add interactivity to a web page. For example, you can display a "tip" when a visitor moves the mouse over a particular text.

You can create behaviors without writing any JavaScript code and get a limited level of functionality. You need to use JavaScript for advanced functions; however, you can use the built-in Behavior functions to achieve most simple tasks such as:

- Do something when an object is clicked.
- Do something when an object is double-clicked.
- Do something when the cursor is over an object, etc.

Onclick

If you want to display a popup message box when a visitor clicks on an image, do the following:





1. Create a new page, save this page as ***popup.html***.
2. Insert an image, ensure the image is selected. Select ***Format > Behaviors***. The ***Behaviors*** toolbar is displayed.
3. Select ***Popup message*** from the ***Insert*** dropdown menu (Figure adjacent).
4. The ***Popup Message*** dialog box appears. Type the message to be displayed when the visitor clicks on the image you inserted earlier (step 2), for example, ***Image Popup using behavior***.
5. Click ***OK***. Save and preview this in your browser (F12). Click on the image and notice the popup displayed (Figure adjacent). Switch to MEW and view the code.

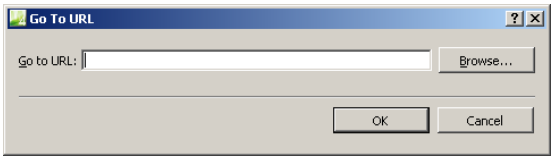
Mouseover

If you want to display a popup when the visitor moves the mouse over an image instead of clicking on it, do the following:

1. Select ***View*** > ***Page*** > ***Design***.
2. Select the image.
3. From the ***Behavior*** toolbar, under ***Events*** dropdown, select ***onmouseover***.
4. Save and preview this in your browser (F12). Move the cursor over the image and notice the popup displayed without clicking.
5. Switch to MEW and view code.

Redirect

You can also redirect visitors to another web page or website when they click or move their cursor over an image. To redirect a visitor, do the following:



1. Create a new page, save this page as ***redirect.html***.
2. Insert an image, ensure the image is selected.
3. Select ***Go To URL*** from the ***Insert*** dropdown menu. The ***Go To URL*** dialog box appears.
4. Enter ***an URL***. For exampl***e, htt***p://www.youtube.com ***and click OK***.
5. Save and preview this in your browser (F12). Click on the image and notice the page is redirected to YouTube. Now try using other behaviors available with MEW.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a web page with the following behaviors: • Use an image which when double-clicked should take visitors to a website. • Insert multiple images and display a popup message for each message (onmouseover).

ASSESSMENT

Answer the following questions:

1. Explain the purpose of behaviors with an example.

Fill in the blanks:

1. Behavior option is available under _____ Menu.
2. _____ behavior displays a popup message when a visitor moves their cursor over an image.

SESSION 15: COMPATIBILITY

Lesson Objectives:
At the end of this session, you will be able to:

- Check compatibility of a website with different web browsers.

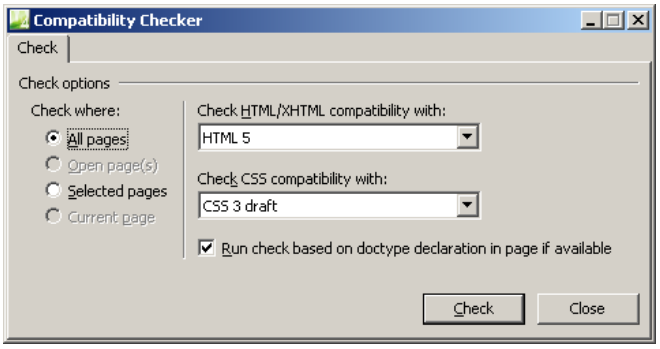
RELEVANT KNOWLEDGE

Checking compatibility with other browsers

Once you complete designing your website, you need to ensure that your website works and looks as expected. You can use the compatibility checker to check all pages of a website are compatible with different browsers. This helps save time and you need not worry about checking each and every web page or item on your website.

To check for compatibility, do the following:

1. Open the website that you want to check.
2. Select ***Tools > Compatibility Reports….*** The ***Compatibility Checker*** dialog box appears.
3. A big advantage is that compatibility checker can be run across the entire website as it checks page by page automatically. You need to specify the HTML and CSS standards that need to be verified for compatibility. For example,



   a. Select ***HTML 5*** from ***Check HTML/XHTML compatibility with:*** dropdown menu.
   b. Select ***CSS 2.1*** from the ***Check CSS Compatibility with***: dropdown menu. Click **Check**.

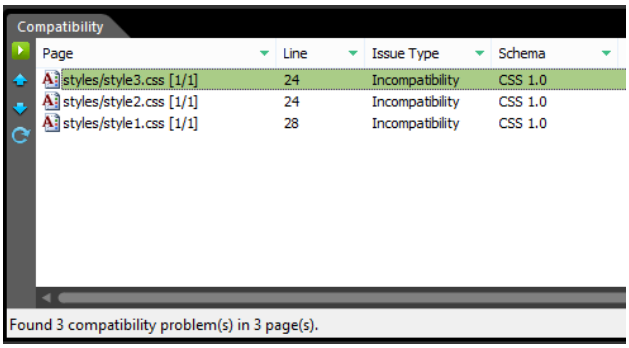
Notice the results displayed. Review each element and correct as required; remember to re-run the checker till you have an error free website.

As you may have some visitors using older browsers (which is most likely on the Internet), you need to check for compatibility with older standards too. Now to test this website, for older standards such as HTML 4.01 and CSS 1.0, do the following:

1. Select ***Tools > Compatibility Reports….***

a. Select ***HTML 4.01 Strict*** from ***Check HTML/XHTML compatibility with:*** dropdown menu.
b. Select ***CSS 1.0*** from the ***Check CSS Compatibility with:*** dropdown menu.
c. Select ***Check***.

2. Notice the results displayed (figure adjacent).

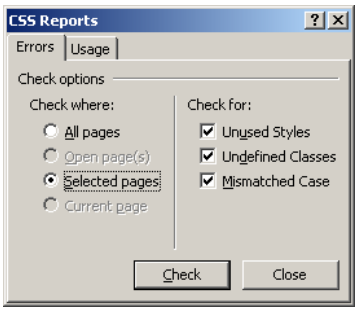


Notice the compatibility problems as the code in Style sheet is found incompatible with CSS 1.0. This indicates that this page may display properly on browsers that support only CSS 1.0.

Note: In such cases where you need to target older browsers or standards, configure the HTML editor to use older CSS standards. However, for existing code you need to modify the code manually.

You can also check for issues with CSS code by:

1. Select ***Tools > CSS Reports***…. The ***CSS Reports*** dialog box appears.
2. Click the button ***Check***. Notice the results displayed.



EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Run compatibility checker, select HTML 5 and CSS 2.1 and validate if the website created earlier is standard compliant.

ASSESSMENT

Answer the following questions:

1. Explain the purpose of compatibility checker with an example.
2. List the versions available in Check HTML/XHTML compatibility with: dropdown menu.
3. List the versions available Check CSS Compatibility with: dropdown menu.

Fill in the blanks:

1. Compatibility Reports is available under _____ menu.

SESSION 16: CODE VIEW, ADD-INS, SNIPPETS AND PAGE TRANSITIONS

Lesson Objectives:

At the end of this session, you will be able to:

- Work with CODE view.
- Use add-ins.
- Use snippets.
- Implement page transitions.

RELEVANT KNOWLEDGE

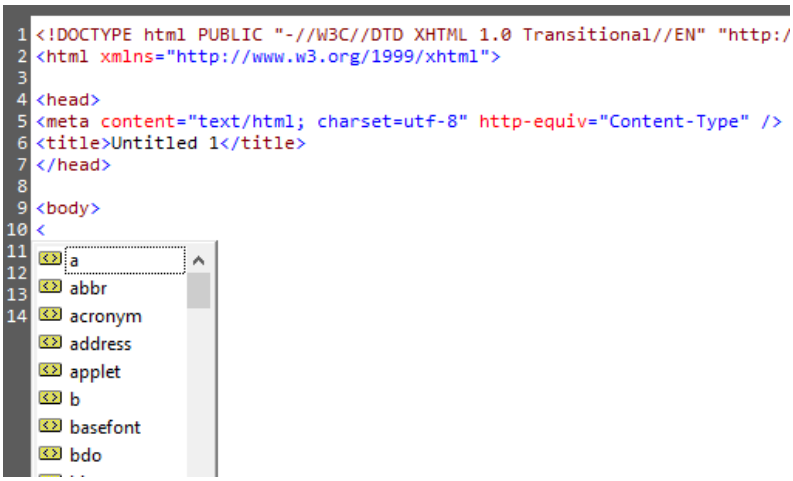
Though most tasks can be completed using GUI, at times you may have to insert code manually (for example when you want to integrate with your website, a third party web application, provided as code).

IntelliSense is a feature that automatically provides you a list of codes and attributes as a popup when you work in the code view mode.

Working with CODE View

To understand how to use it, do the following:

1. Create a new HTML page.
2. Select ***Code View***.
3. Place the cursor after the ***<body>*** tag.
4. Type angle bracket **<** to open the tag. Notice the list of elements displayed (Figure below).



5. Select a element from the list, for example: ***h1*** .

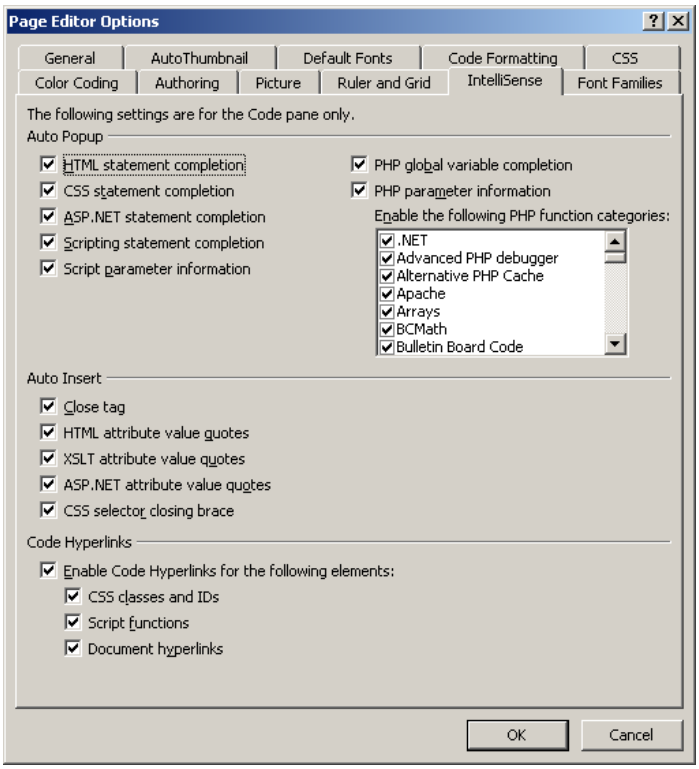
6. Now place the cursor after the element and press spacebar. Notice the list of attribute related to this element is displayed. Select ***align***, (notice the attribute added), select = on your keyboard. Notice the value corresponding to this attribute is selected. Select ***Center***.
7. Close the tag using >. Notice the end tag is automatically added.

Though code view can be difficult to use in the beginning, once you have adequate practice, you will gain total control of the coding environment!

To view IntelliSense settings, do the following:

1. Select ***Tools > Page Editor Options***….
2. Select the tab ***IntelliSense*** (Figure adjacent).
3. Notice the settings. Note that you need additional technical expertise to work with this area.

   Important: Do NOT *change any setting here.*



Add-ins

Add-ins extends the capability of the main program by adding enhanced custom commands and specialized features. You can download a variety of Add-ins from:

- http://msdn.microsoft.com/en-us/expression/jj873995.aspx
- http://www.webassist.com/go/xweb-add-ins
- http://www.expressionextras.com/products/lightbox.htm
- http://www.dotnetcurry.com/ShowArticle.aspx?ID=534

Of Course, you can use Google to find more Add-ins! Once you have downloaded an Add-in, use the following procedure to install the Add-in:

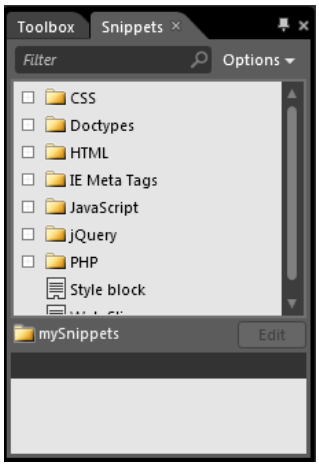
1. Select ***Tools > Add-ins***. The ***Manage Add-ins*** dialog box appears.
2. Select ***Install***…. Browse and select the Add-in and then click ***Open***.
3. Select ***Yes***.

4. Repeat the procedure to include more Add-ins.

Note: Add-ins may need to be installed through a special procedure. Refer to Add-ins help file for detailed instructions.

Using Snippets

Snippets are pieces of programs re-used by most developers. Snippets are useful as you can keep reusing the code created many times across multiple web pages or web sites saving enormous amount of time and effort. To view and insert the available snippets, do the following:



1. Select ***Panels*** **>** ***Snippets***. Notice the list of snippets available separated into categories such as CSS, HTML, JavaScript, JQuery, etc.
2. To insert a snippet, do the following:
    a. Create a new page. Place the cursor where you want the snippet to be placed.
    b. Select ***View*** **>** ***Page*** **>** ***Code***. (Snippets can be inserted only in Split or Code View).
    c. Expand ***HTML***, expand ***Hyperlink folder***.
    d. Double-click on a snippet, for example: ***Add to favorites***. Notice the code is added to the web page.
    e. Save and preview this page in browser (F12). Switch to MEW to view code.

Note: You may require following additional instructions for some of the snippets listed here. Refer to the help file for detailed instructions.

PSD Templates

As a web designer, you need to create pages that are attractive and simple. Remember that along with showcasing content to a visitor and the design also needs to be pleasant, encouraging them to repeat their visit to the website.

When it comes to Web design, you need to maintain a balance between visual design and code. Though it is possible to create simple web designs using standard HTML, it is always a good practice to research on good designs. Components of some of the attractive websites are usually created using Adobe Photoshop and later integrated into the web site for additional functionality such as text content, forms, etc.

You can import certain parts (or layers) or entire images into your website using MEW. Given here is a list of websites where you can find Photoshop templates (some of them are free!):

- http://www.psdtemplates.com/templates/
- http://www.freepik.com/free-psd/web-templates

You can browse, select, download and use these files. Refer to website terms and conditions for license information.

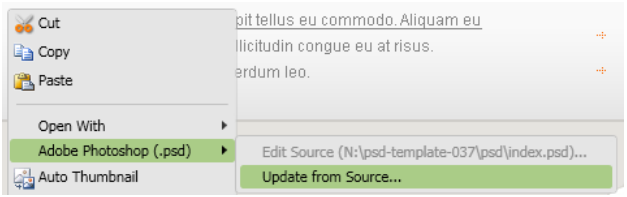
Link PSD & MEW

Also there is a special feature that can be used for updating an image whenever the original (.PSD) Photoshop image is modified. To understand how to use this feature, do the following:

Import a .PSD (Photoshop files use this extension) file and do the following:



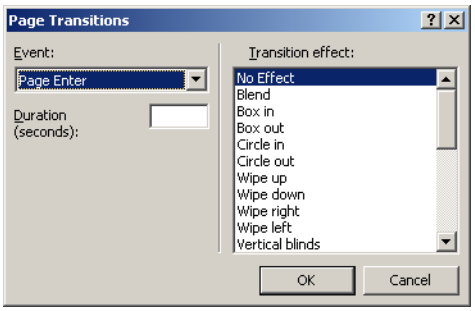
1. Create a new web page, save the file as ***psd.html***.
2. Select ***File > Import > Adobe Photoshop (.psd)…***.
3. Browse and select the file. Click ***Open***. ***Import Adobe Photoshop File*** dialog box appears (Figure adjacent).
4. You can select the layers you want to import using the options in the left pane. Select ***Compatibility Image*** located at right bottom and click ***OK***.
5. Click ***Save*** when prompted.
6. Right-click on the image, notice the menu item Adobe Photoshop (.psd) (Figure adjacent).



7. You can update this image whenever the original image is updated by selecting ***Update from Source…***. This is possible because MEW maintains a link between the image and the original source. This is one feature that is useful for both web developers (who write code) and web designers (who design sites)!

Page transitions

You can apply special effects to web pages just as in presentation software. This helps present special effects to visitors. To add transitions, do the following:



1. Create a new page, save the file as ***trans.html***.
2. Select ***Format > Page Transition….*** The ***Page Transitions*** dialog box appears (Figure adjacent).
3. You need to select an event to which the effect should be applied. Select ***Site Enter*** from ***Event:*** dropdown and select ***Circle*** In from ***Transition effect:*** list.
4. Type ***5*** in ***Duration (seconds):*** box and click ***OK***.
5. Save and preview this page in browser (**F12**). Switch to MEW and view code.

Note: Page Transitions will work only on Internet Explorer 5.5 or above.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Download and use the following Add-ins: a. PayPal ecommerce Toolkit b. WordPaste Add-in c. Insert Bing Map Add-in So think DHTML Menu Addon
2.	Include different snippets in web pages created in earlier sessions.
3.	Set the following transition effects for each web page created in earlier sessions: a. Random dissolve b. Blend c. Box Out d. Split horizontal in
4.	Download and import a .PSD file.

ASSESSMENT

Answer the following questions:

1. Explain the purpose of Add-ins.
2. List any three website that offer Add-ins for download (use Google).
3. Explain the purpose of snippets with an example.
4. Explain the purpose of Page Transitions with an example.

Fill in the blanks:

1. Add-ins is available _____ menu.
2. Snippets can be accessed from _____ menu.
3. PSD can be imported from _____ menu.
   Page Transitions is available _____ menu.

SESSION 17: DYNAMIC WEB TEMPLATES

Lesson Objectives:
At the end of this session, you will be able to:

- Create and edit dynamic web templates.

RELEVANT KNOWLEDGE

Templates help you organize the entire website to have a consistent look and feel. This is very helpful when you work with large number of web pages.

On your website, you may have some common items displayed on all pages such as the logo, copyright & organization details, navigation menu, etc. but the content may vary on each page. Here, you can create a dynamic web template (DWT) with fixed positions for common elements and modifiable designated portions on each web page.

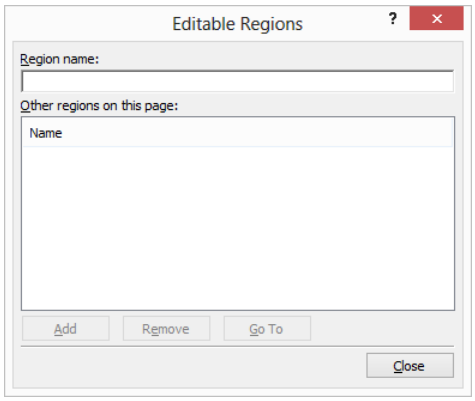
Unlike standard templates, Dynamic Web templates have the following features:

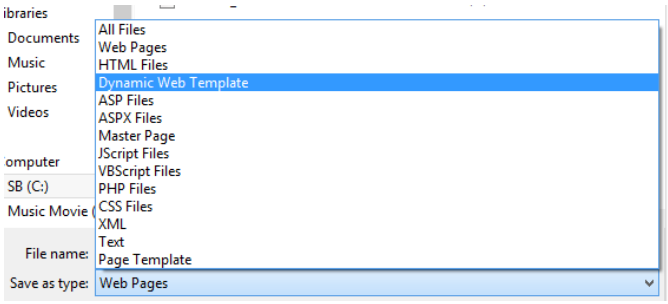
1. When you update the DWT, all web pages in the website are automatically updated to changes.
2. You can create multiple DWT and keep changing just the template that affects the entire website.
3. You can allow only specific portions of the pages to be edited instead of whole web page resulting in better control and reduced chances of mistakes. This feature is very useful when multiple developers work on the same website.

Creating a dynamic web template

To create a dynamic web template, do the following:

1. Create a new web page (to be used as template).
2. Add common elements such as a logo (picture), company name, copyright notice at the bottom of the web page, etc.
3. You need to add editable regions and that will be the only area in which the content can be modified. To create an editable region, do the following:
    a. Place the cursor where you need to place content (*remember, this will be the **only** area where the content can be placed or changed*). Right-click and select ***Manage Editable Regions….*** The ***Editable Regions*** dialog box appears (figure below).
    b. Type a name, for example: ***Content***. Click ***Add***.
    c. Click ***Close***.

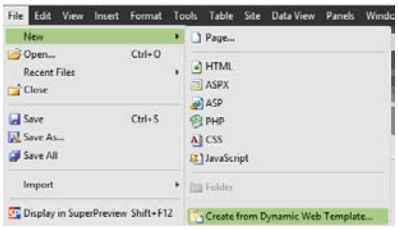




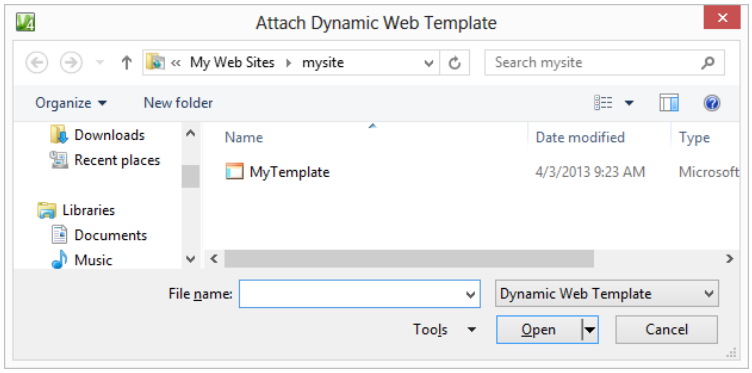
4. Select ***File > Save***. Select ***Dynamic Web Template*** from the ***Save as type:*** dropdown menu (Figure above, right). Type a file name, for example: ***MyTemplate*** and click ***Save***.

Using a dynamic web template

You have created a DWT template. If you want to create web page based on this template, do the following:



1. Select ***File > New > Create from Dynamic Web Template***…. (Figure adjacent).
2. Notice the template displayed in the list. Select the template, for example: *MyTemplate* and click ***Open***. A web page based on this template will be created and displayed.



Template List



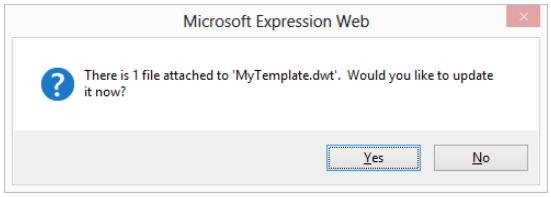
Web Page

3. Notice that you are able to type content only in the editable region specified earlier and rest of the area are not editable. Now type some content in the "Content" area. Save this page as a normal web page. For example, ***Page01.html***.
4. Create at least 2-3 pages based on this DWT. Save the files.

Editing a dynamic web template

When you edit the DWT, it automatically updates the changed layout to all the pages created using the DWT (for example, when you want to change to a different layout or update the company logo without affecting the content). To edit a DWT, do the following:

1. Locate the Dynamic Web Template you created earlier (it will be displayed with the file extension .dwt) and double-click on it.
2. Now add another editable region by placing the cursor elsewhere in the web page. Name the region as "Photos".
3. Now save this DWT (***CTRL+S***). Notice the message displayed (figure adjacent).
4. Select ***Yes***. Automatically all the web pages created using this template are updated.
5. Open any of the web pages created using this template and notice the changes.
6. Insert an image in the "Photo" region. Save the web page.



Sometimes you may have to use a completely different layout for entire website. In such cases you can create a new dynamic web template and associate all the web pages to this new DWT. This in turn will (in no time) apply the new structure to all the web page eliminating the need for making layout changes to each web page!

To create a new DWT and associate all web pages (or selected web pages), do the following:

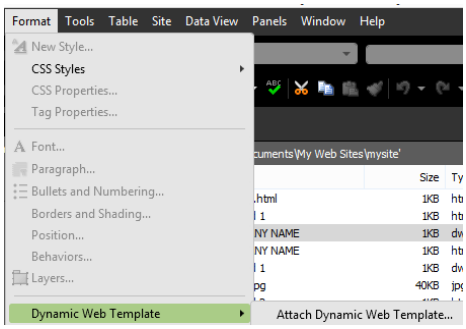
1. Create a new DWT by swapping the "Content" and "Photos" regions:
    a. Create a region for "Photos" (at the top)
    b. Create a region for "Content" (below Photo)
2. Save this as DWT with a new file name, example: MyTemplate02.

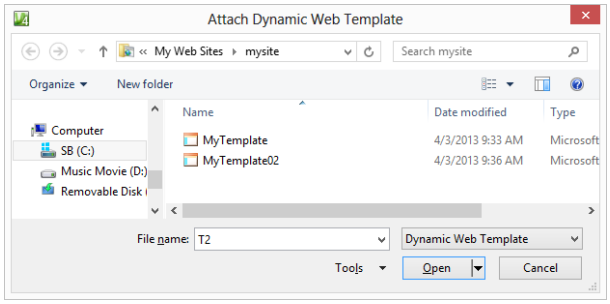
Note: You need to include the region names as the content has to be retained but placed according to the new layout. Use the same region names when you want to work with different DWTs. Otherwise content may not swap properly leading to issues.

Now, to use this new DWT, associate the web pages to the new template.

1. Select all the web pages (Page0x.html) using the ***folder*** view (left pane). Use ***CTRL + Click*** to select multiple pages.

2. Select ***Format > Dynamic Web Template > Attach Dynamic Web Template…*** (Figure below, left).





3. ***Attach Dynamic Web Template*** dialog box appears (Figure above, right).
4. Select the second template, for example: MyTemplate02 and click ***Open***.
5. Notice the results displayed. Content from "Photos" and "Content" are automatically swapped based on the new template.

Remove DWT association with selected or all web pages

When you no longer need to use DWT or are using a HTML editor that may not have support for DWT, you can detach the DWT linked with selected or all web pages.

Note this procedure only removes the relationship and is a one-way process. Content and the layout are left undisturbed. However if you want to associate with a DWT you need to start all over again! If you decide at some point to remove the relationship of DWT and selected or all web pages, do the following:

1. Select all the web pages (Page0x.html) using the ***folder*** view (left pane).
2. Select ***Format > Dynamic Web Template > Detach from Dynamic Web Template***.
3. Notice the message displayed, select ***Close***.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a dynamic web template using the following guidelines: • Use a table to link different pages in a website for navigating to other pages. • Use a table for the content area. • Insert copyright notice at the bottom and a hyperlink to the homepage (default.html) Link this DWT to the all the web pages in the website created in previous sessions.

ASSESSMENT

Answer the following questions:

1. Explain the purpose of dynamic web template with an example.

Fill in the blanks:

1. Acronym for DWT _____.
2. _____ from the Save as type: dropdown menu should be used for creating DWT.

SESSION 18: SEO - SEARCH ENGINE OPTIMIZATION

Lesson Objectives:

At the end of this session, you will be able to:

- Understand the concept of SEO.
- Use SEO Checker.

RELEVANT KNOWLEDGE

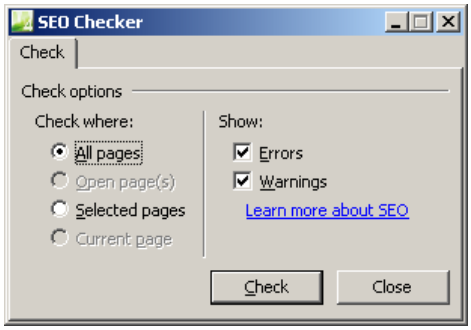
Search Engine Optimization or SEO refers to the process that affects the website visibility or ranking when displaying search results. Search Engines search contents of a web page and create indexes to display results. As a web developer, you need to understand how search engines work and how to get better search ranking. SEO Checker built-in with the HTML Editor gives detailed reports that help you optimize the website for better ranking.

Anatomy of a Search Engine

Search engines crawl a website (and hence referred to as *Spiders*) to create index of content. This index helps find a matching web page or link based on keywords entered by visitors.

Search engines index the following components of a web page:

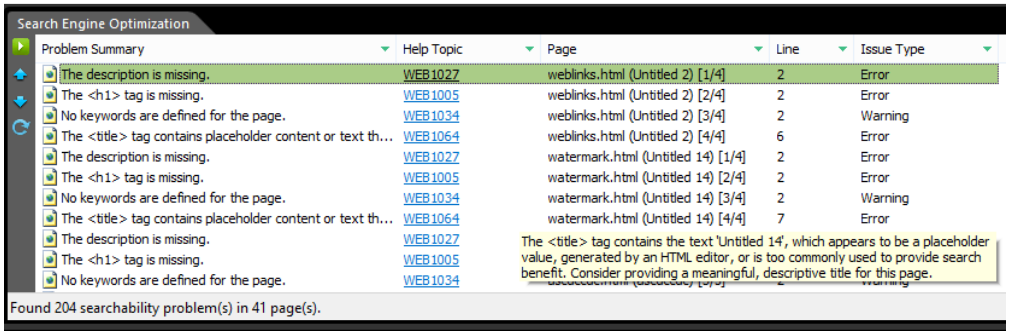
1. Page Title (only the first 70 characters are displayed in search results!)
2. Page Description (at least first 156 characters are displayed in search results!)
3. Page Keywords
4. Page headers (H1)
5. Links to other pages
6. Strong text (bold)
7. Phrases
8. ALT Text in images……..And many more.



Note: You need to learn more about SEO before taking decisions on optimizing a website. . You need to refer to the SEO process of each search engine at their respective websites. However, you can use the SEO Checker to understand what needs to be optimized for a better ranking.

1. Select ***Tools > SEO Reports***…. SEO Checker dialog box appears (Figure above).

2. Select ***All Pages***, and the select ***Check*** .Notice the results (Figure below).



You can click on each message displayed in the list to find out and fix related issues. For example for a message as "The Description is missing", you can add a description using the META tags to correct it. Once errors are identified and fixed, run the SEO Checker again to confirm if the website is optimized.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Verify the website created earlier using SEO Checker.

ASSESSMENT

Answer the following questions:

1. Explain the purpose of SEO.
2. Explain the purpose of SEO Checker with an example.

Fill in the blanks:

1. Acronym for SEO _____.
2. SEO reports can accessed from _____ menu.

SESSION 19: FORMS - ADVANCED

Lesson Objectives:

At the end of this session, you will be able to:

- Create a form to save results in a database.

RELEVANT KNOWLEDGE

So far, you have been using HTML and CSS for creating simple web pages. These are referred to as *Static Web pages*. While static web pages are good enough for creating basic web sites, you need to learn and use technologies such as ASP, PHP, etc. for creating dynamic websites. Dynamic Websites allow visitors to search and locate information (such as a search feature of search engines or database listing), submit information (such as feedback, rating, voting) etc.

Advanced Forms

You can create a fully functional form using MEW. Data filled using a form can be stored in a database or sent to a specific email address. But these features require proper support from the web hosting provider, primarily the support for FrontPage Server Extensions.

Special Note:

FrontPage Server Extensions is a technology that provides special functionalities on web servers created using Microsoft FrontPage or Microsoft Expression Web. Though this technology was used for over a decade, it is considered obsolete due to the evolution of other equivalent or better technologies. You may still find a few web hosting providers extending their support to this almost obsolete technology.

Microsoft Expression Web replaced Microsoft FrontPage. Most of the activities in this module can also be done using Microsoft FrontPage. However, Microsoft FrontPage has a limited support for recent developments in web technologies such as CSS3, HTML5, etc. Yet, you can use form functionalities outlined in this module if your web hosting provider supports only FrontPage Server Extension.

If you want to create a form for your Intranet or if your web hosting provider supports FrontPage Server Extensions, you can use procedure in this session to create the form, configure it to save the data in a database and later publish it to the remote computer.

Web Server

You can use the web server in-built with the operating system. Windows includes IIS (Internet Information Services) in both client and server operating systems. IIS in-built with client operating system such as Windows XP, Vista & 7 is usually sufficient for

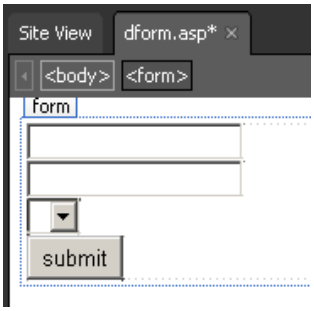
websites having few visitors. You can install IIS on Windows Vista & 7. Use the help file for detailed instructions.

Note: FrontPage Server Extensions is not available in Vista / Windows 7 & Windows 2008. You may download an evaluation copy of FrontPage Server Extensions (FPSE) from www.iis.net. Some web hosting providers still give support for FPSE and you will be able to publish using FPSE.

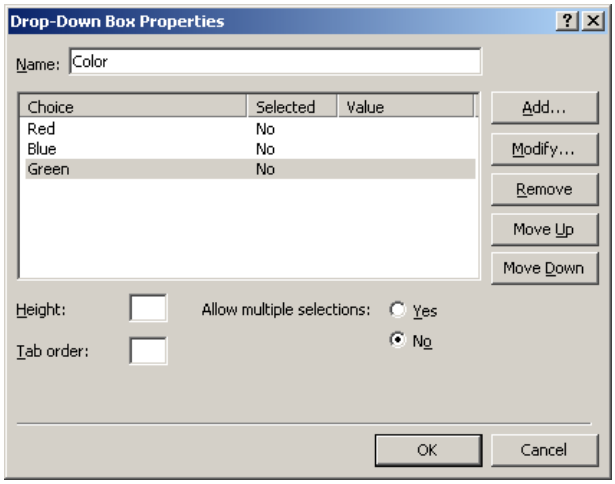
Creating forms

You can create forms and use additional functionalities of MEW. To create a form and store the details in a database, do the following:

1. Select ***File > New > ASP*** and save this page as ***dform.asp***.
2. Insert a form and add the following:
    a. Insert ***Input (Text)***, for visitor's name.
    b. Insert ***Input (Text)***, for visitor's email address.
    c. Insert ***Drop-Down Box***, for collecting visitor's favorite color.
    d. Insert ***Input (Submit)***.

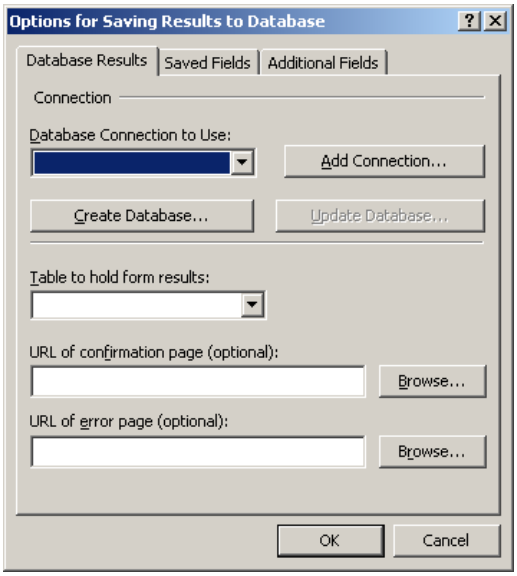


Now your form should look similar to the one adjacent.
You need to customize this form before it is displayed to the visitor. Now to customize the fields, do the following:



3. Double-click on the first ***Input (Text)*** field. Type ***Name*** in ***Name:***, click ***OK***.
4. Double-click on the second ***Input (Text)*** field. Type ***Email*** in ***Name:***, click ***OK***.
5. Double-click on the drop-down box. ***Drop-down Box Properties*** dialog box appears.
6. Since you are collecting details of visitor's favorite color, you need to add dropdown values for visitor to select.
    a. Notice there is a default dropdown with null value (no value); you can remove that by selecting ***Remove***.
    b. Click ***Add…***, Type ***Red*** in ***Choice:***, Click ***OK***.
    c. Click ***Add…***, Type ***Blue*** in ***Choice:***, Click ***OK***.
    d. Click ***Add…***, Type ***Green*** in ***Choice:***, Click ***OK***.
    e. Now change the ***Name:*** (Select1) by replacing the text to ***Color***.

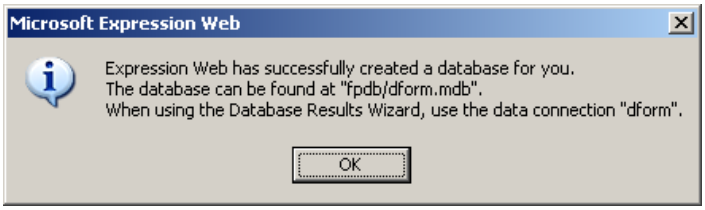
7. Click ***OK***.

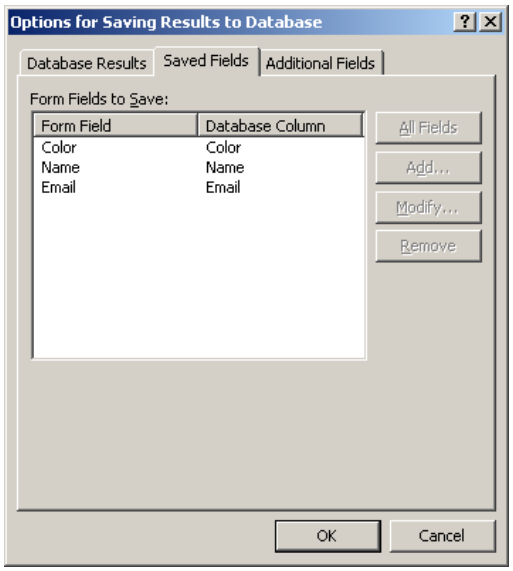


Creating a database

To save the details collected from the form, you need to have a database with corresponding fields ready. MEW can create a database for you and link these fields to the database automatically. To create and link the database automatically, do the following:

1. Right-click on the form, select ***Form Properties***. The ***Form Properties*** dialog box is displayed.
    a. Select ***Send to database*** (**Note:** *Requires FrontPage Server Extensions*).
    b. Select ***Options…***. The ***Options for Saving Results to Database*** dialog box appears (figure above).
    c. To create the database, select ***Create Database…***. MEW automatically creates an Access database (only format supported for automatic creation). Click ***OK*** to close the popup.
    d. Select ***Saved Fields*** tab. Note ***the fields are m***apped from form to database automatically. Click ***OK*** twice.





Now the form is ready but you need to publish the form to a server that supports FrontPage Server Extensions; otherwise this form will not work. Once publishing is complete, you can use the published URL to view the webpage.

Publish the form to a website

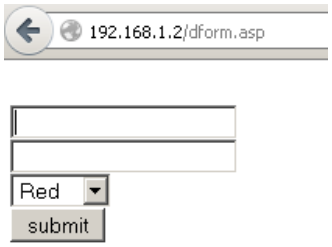
Note*: Forms are published automatically along with other files in a website.*

1. Select ***Site > Publishing Settings….***
2. Select ***Add….***
    a. Type a friendly name in ***Name:***
    b. Select ***FrontPage Server Extensions*** from ***Connection Type:*** dropdown menu
    c. Type the remote location, for example: www.example.com
    d. Type the credentials (Username and password) provided by the hosting provider.
    e. Click ***Add***.
3. Click ***OK***.
4. Select ***Site > Publish All Files to…NAME (IP address of the server or computer that supports FPSE).***

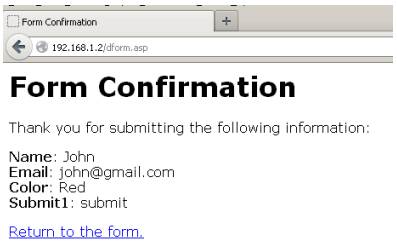
Note*: Publishing may take some time.*

Viewing the webpage

Visitors can now view the website or webpage. When they click on the URL that takes them to the form, the form will appear.



Visitors can fill the form by entering the details and when they click submit, they will see a confirmation page similar to the one below:



The database is stored in a special folder with the name fbdb; this folder is hidden for security purposes and is not accessible to visitors.

You can open this database using your database software to view or modify information within this database. This could be useful when you want to collect all the email addresses and send a newsletter to visitors.

Note: Use Windows Explorer to navigate to the folder that contains this website if you are using a web server within LAN; Access database is stored in a special folder named fpdb. If you are using MEW, then the access database can be retrieved from the fpdb folder in folder list view.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities

1.	Create a detailed form for the following fields and configure it to save the details in a database. a. First Name b. Last Name c. Age d. Email Address e. Favorite Car (Include at least three different vendors, allow selection through Checkboxes – Single Selection) f. City (Create a list and display using a dropdown menu) g. State (Create a list and display using a dropdown menu) h. Pin Code i. Comments

ASSESSMENT

Answer the following questions:

1. Explain the purpose of FrontPage Server Extensions.

Fill in the blanks:

1. _____ is the product was replaced by Microsoft Expression Web.
2. Acronym for IIS _____.
3. Create Database option is available in _____ dialog box of form properties.

SESSION 20: PUBLISHING WEBPAGES OR WEBSITES - I

Lesson Objectives:

At the end of this session, you will be able to:

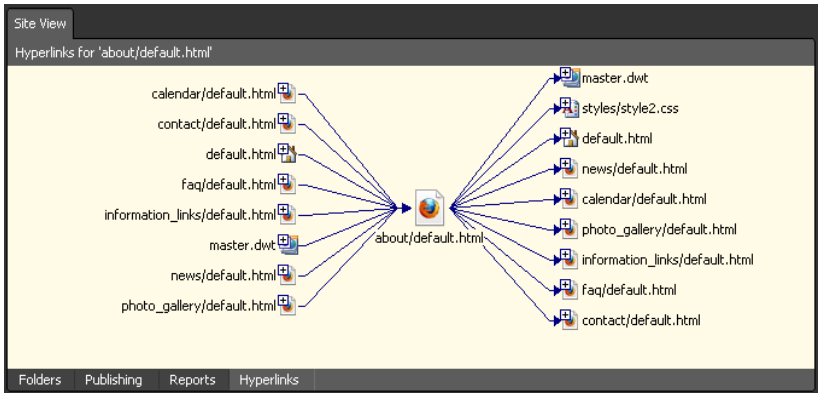
- Optimize Web pages.
- Estimating the size of content.
- Optimize HTML.

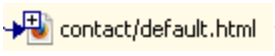
RELEVANT KNOWLEDGE

You publish a website, only after you completely verify the website's functionality. Hyperlinks (internal & external) should be checked and replaced if necessary. Given here is a list of standard procedures to be followed prior to site publishing.

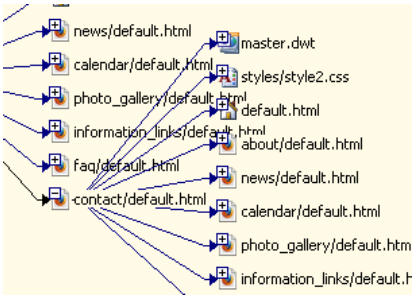
Examining structure of a website

Create a visual diagram of hyperlinks of a website. This helps you understand the navigation structure or to trap any broken links. To view the structure of a website, do the following:

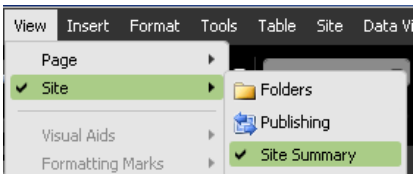


1. Open the website
2. Select ***View*** > ***Site*** > ***Hyperlinks***. Notice the visual diagram (Figure above).
3. You can further expand and understand the links to other pages. Select the plus symbol next to the link (

). Notice the results displayed (Figure adjacent).

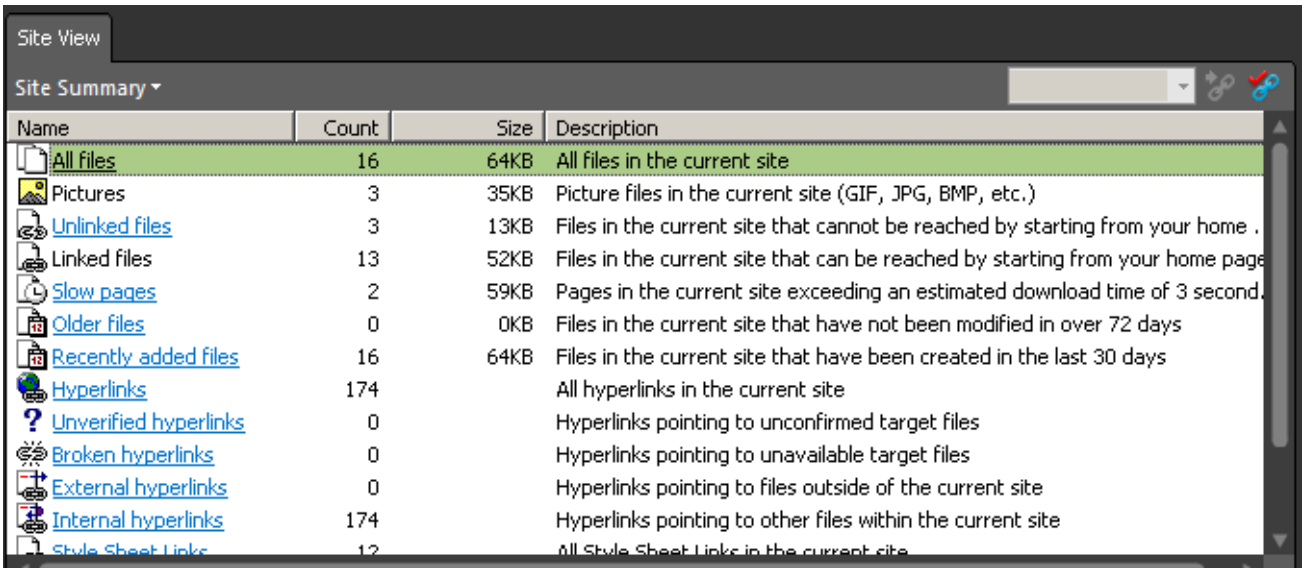


Estimating size of a website



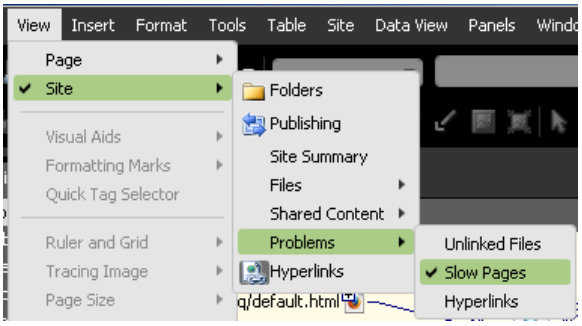
If you know the size occupied by files in a website, you can determine if you have sufficient web space (as allocated by an ISP) or even determine the time taken to download before visitor can view the web page.

1. Select ***View > Site > Site Summary*** (Figure above).
2. Notice the results displayed (Figure below). Look at the list of items analyzed and given below Name, Count, Size and Description.

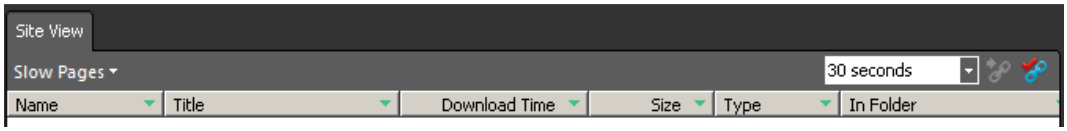


Removing slow pages

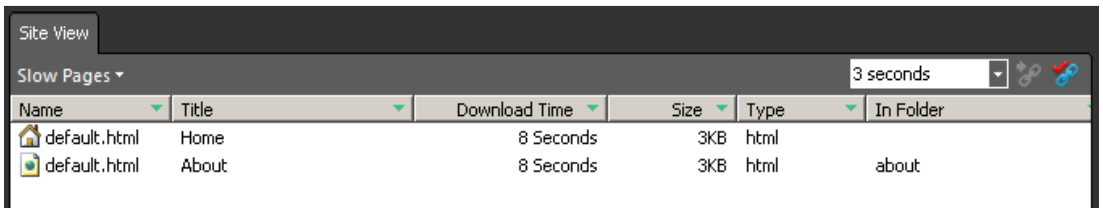
You can now decide to remove items that may possibly slow down a page.



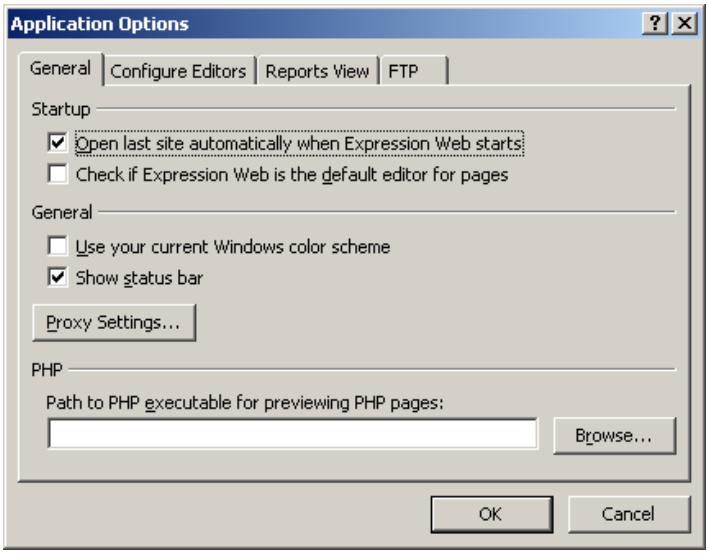
1. Select ***Site > Problems > Slow Pages*** (Figure adjacent)
2. By default, HTML editor assumes and displays only the pages that take more than 30 seconds to load. You can change the value to 3 seconds to list web pages that take more than 3 seconds to download. Select 3 Seconds from the dropdown (Figure below).



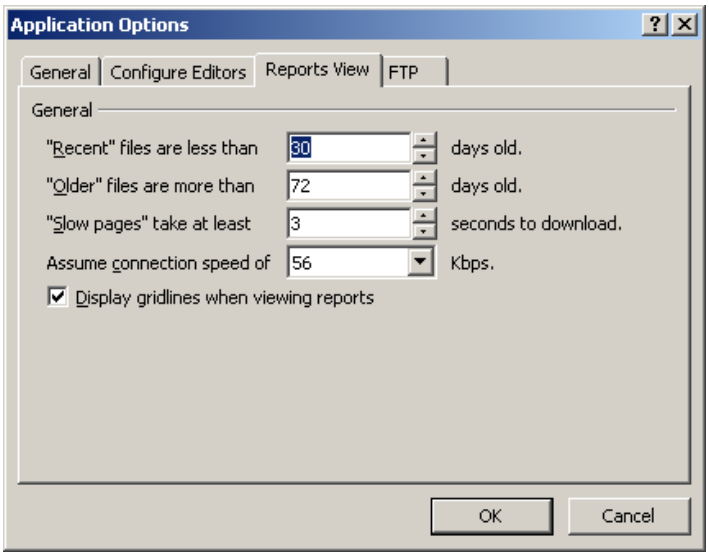
3. Notice the results displayed (Figure below).



HTML calculates based on two parameters; the amount of bandwidth and time taken to download within the set bandwidth. To modify this setting, do the following:



1. Select ***Tools > Application Options…*.** **Application Options** dialog box will be displayed (Figure adjacent).
2. Select **Reports View** tab (figure adjacent, below).
3. Notice the values of ***"Slow Pages" take at least*** and ***Assume connection speed of*** (indicated in kilobits per second).



Note: This is not YOUR connection speed. This refers to the connection speed available at the web hosting end.

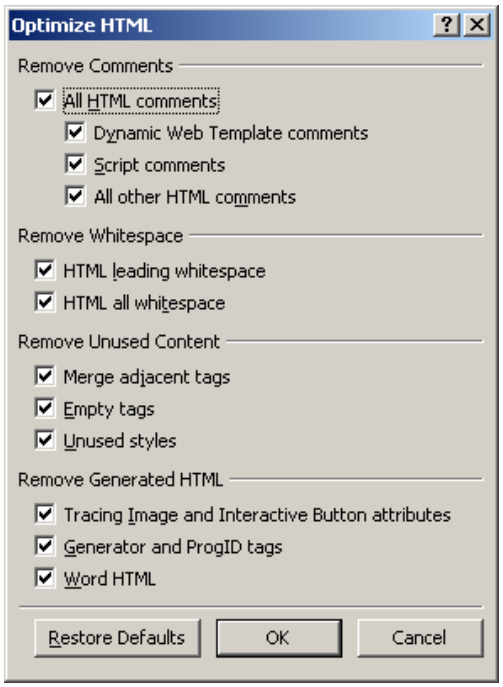
DWT

If you have used Dynamic Web Template to create the website, check for updates made to the template. Also you can update all the pages by selecting the ***Format > Dynamic Web Template > Update All Pages*** option to ensure all page layouts are up to date.

Code optimization

Before you publish, you need to cleanup your web page for any unnecessary code that can result in reducing page size. This in turn will help in faster downloads. You can use the in-built optimizer tool to remove unnecessary code by:

1. Select ***Tools > Optimize HTML…***. The ***Optimize HTML*** dialog box appears.
2. During development you may have left behind some code such as comments. These might have to be removed before you present the website to an audience. To do so, select ***All HTML Comments*** in ***Remove Comments*** section and then select ***OK***. All the comments will be removed automatically.



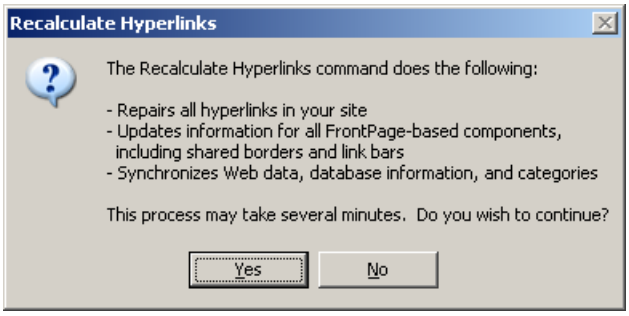
To optimize a web page, do the following:

1. Open an existing page (at least 5-10 KB in size, record the size for comparison).
2. Select ***all*** the items under ***Remove Components*** list.
3. Click ***OK***. Notice the difference in file size.

Fixing errors

Before you publish the website, you need to verify if there are any pending issues. This helps you save time and unnecessary problems that may arise post publishing the website. To verify and fix (if there are any errors), do the following:

1. Open the Website.
2. Select ***Tools > Recalculate Hyperlinks***. The ***Recalculate Hyperlink*** dialog box is displayed (Figure adjacent).
3. Click ***Yes***. If there are any issues, they will be automatically fixed.



EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Create a visual diagram of any of the websites created earlier. Share it with your classmates. Optimize the HTML code in your website, remove all unnecessary code.

ASSESSMENT

Answer the following questions:

1. Explain the purpose of Site Summary with an example.
2. Explain the purpose of Code Optimization with the procedure.
3. Explain the procedure to fix errors in a web page automatically.

Fill in the blanks:

1. Structure of website can be viewed using ____ option in ____ dropdown menu of ____ menu.
2. Site summary is available in ____ dropdown menu of ____ menu.
3. Optimize HTML is available in _____ menu.
4. Recalculate Links is available in _____ menu.

SESSION 21: PUBLISHING WEBPAGES OR WEBSITES - II

Lesson Objectives:
At the end of this session, you will be able to:

- Choosing a hosting provider.
- Work with publishing options.
- Use Web Packages.
- Backup websites.

RELEVANT KNOWLEDGE

When you want others to see your content designed using HTML, you need to host the content in a web server to be viewed by the public. There are several free web hosting providers that provide free web space for your content. Though there may be restrictions on the total web space or advertisements posted within your website, the web space is usually sufficient for hosting small websites or practicing HTML! Use Google or other search engines to find a free web hosting provider.

Web hosting providers usually allow publishing through FTP. Some web hosting providers allow other methods such as SFTP, WebDAV, etc. which you can use to upload your website. Some of them allow other methods such as SFTP (secure FTP), WebDAV, FrontPage Server Extensions, etc. and these are detailed usually in the page that displays various plans for comparison.

For web pages created using HTML, you can use any provider that supports FTP.

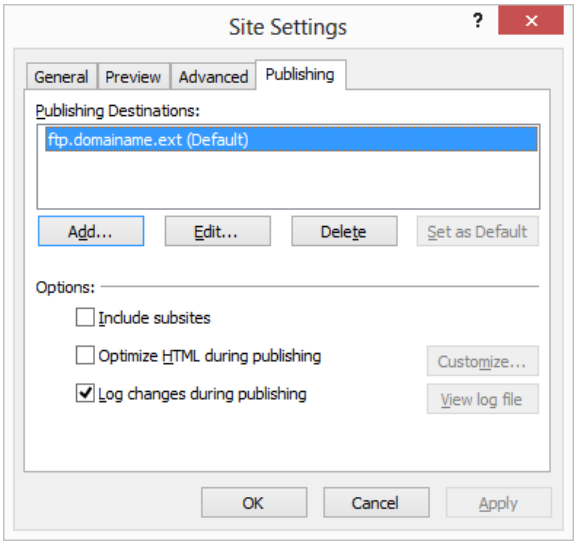
Publishing a website

Once you have created the website, you need to publish it to computers that will be available 24x7 for visitors to view. When you sign up with a hosting provider, generally, you will be given multiple options to publish the content such as FTP, WebDAV, FrontPage Server Extensions, etc.

To publish a website using FTP, do the following:

1. Open the website that you need to publish.
2. Select ***Site > Publishing Settings***…. The ***Site Settings*** dialog box appears.
3. Prior to publishing, you need to add details such as the destination computer's IP addresses or domain name, settings and credentials. For example if you have signed up with a web hosting provider who has given you an IP address 192.168.1.200 and FTP as the method for publishing, do the following:
    a. Click ***Add***…. The ***Connection Settings*** dialog box is displayed.

b. Enter the following details:
    i. Type a name in the ***Name:*** textbox (usually your domain name or destination computer name or IP address of the destination).
    ii. Select ***FTP*** from the ***Connection Type:*** dropdown menu.
    iii. Hosting providers will provide a path for publishing, for example: ***ftp.domainame.ext***. Type the path in ***Location:*** textbox.
    iv. Specify the folder where the content will be stored (Usually directory is auto-selected for websites, use this only if required).
    v. Enter the username and password in ***Credentials:*** section. This will be used when you publish from the HTML editor. Generally multiple files are transferred simultaneously between HTML editor and destination resulting in faster transfers. Leave this setting as it is or contact hosting provider for this detail only if required.
    vi. Click ***Add***.



c. Notice the change in the ***Publishing*** tab (Figure above) indicating the remote site is added to the list.

4. Click ***OK***.

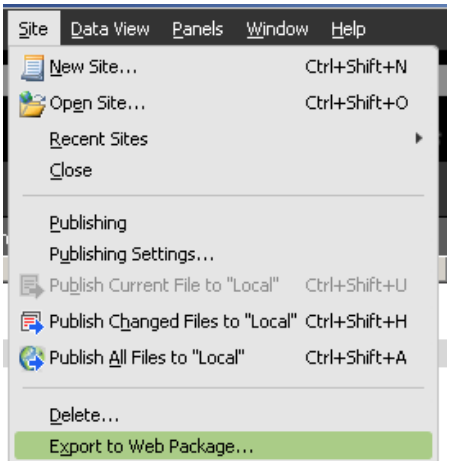
Now MEW is ready with the remote site settings for publishing content. Whenever you want to publish (first time or periodic updates), do the following:

5. Select ***Site > Publish All files*** to ***[NAME]***. Once published, use the web browser to view the website.

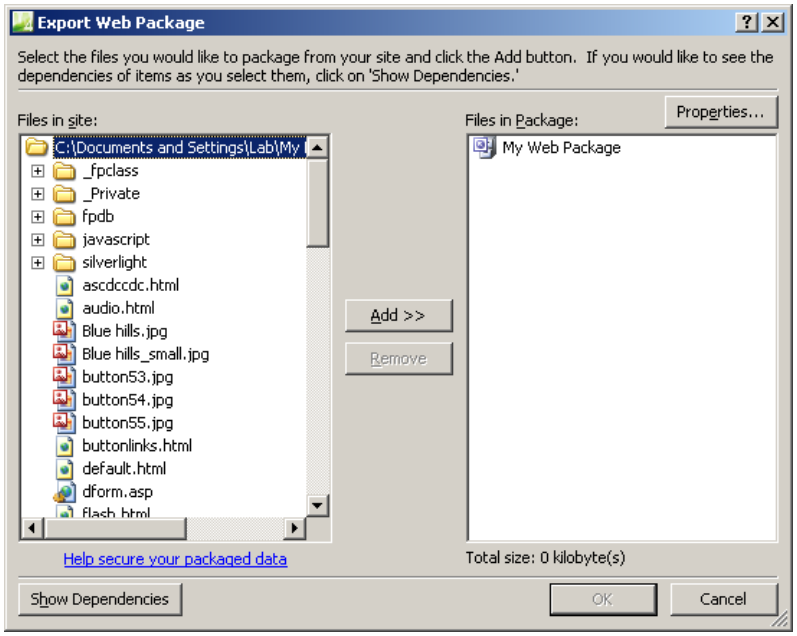
Web packages

Another method to take your website to a remote computer is by using the Web package feature. You can use the Web package feature to transfer contents of your entire website (preserving the structure) to a remote computer. This is useful when you want to send your website (including the complete structure) for being hosted from a remote computer or, if the existing structure is to be used for creating another website.

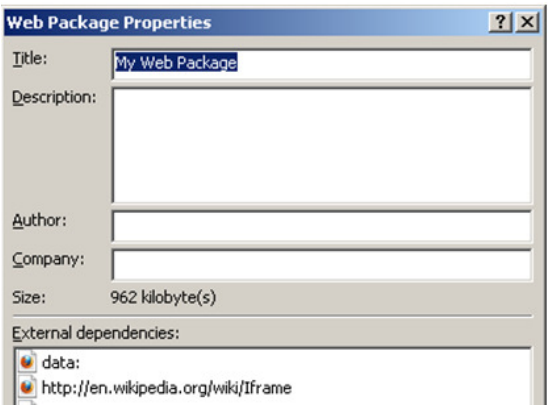
To export existing website to a web package, do the following:



1. Open the website.
2. Select ***Site > Export to Web Package…*** (Figure adjacent).
3. ***Export Web Package*** dialog box appears.
4. You can select individual files or folders or, package the entire website. To package the entire website,
   a. Place the cursor at the root folder (C:\ in the image adjacent). Click **Add>>**. Notice the entire website is added to the right pane.



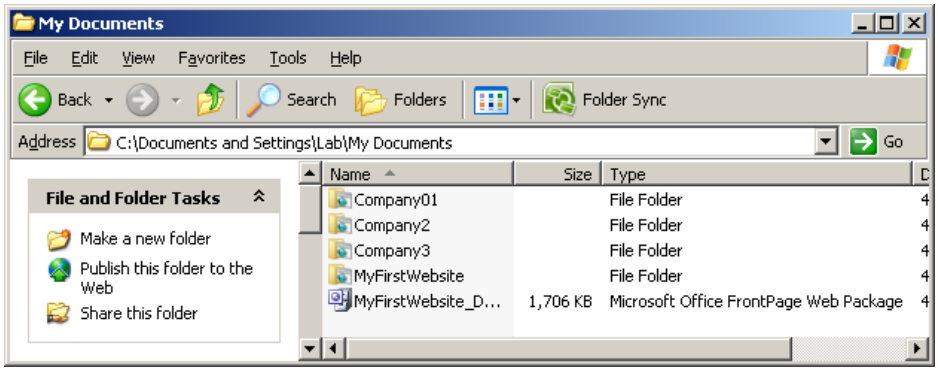
   b. You can use a friendly name for this package. Select ***Properties…***, and the ***Web Package Properties*** dialog box appears.
   c. You can enter company name, author, a suitable title for this package. ***External dependencies:*** has a list of external resources that this website uses. This is helpful when you are using any files, folder or links that need to be verified before sending the package to someone.



      i. Enter a title in ***Title:*** textbox, for example: ***WEBPACKAGE***.

ii. Enter a description in ***Description:*** textbox, for example: ***created using MEW***.
iii. Enter your name in the ***Author:*** textbox
iv. Click ***OK***.

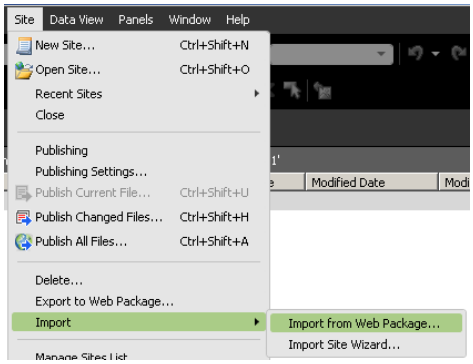
5. Click ***OK***.
6. When prompted to save this Web Package, type a filename for example: ***MyFirstWebsite_DATE***. Click ***Save***. Notice the result displayed (Figure above).



7. Click ***OK***.

Navigate to the folder where you saved this web package and notice the entire website packed as a single file (Figure above).

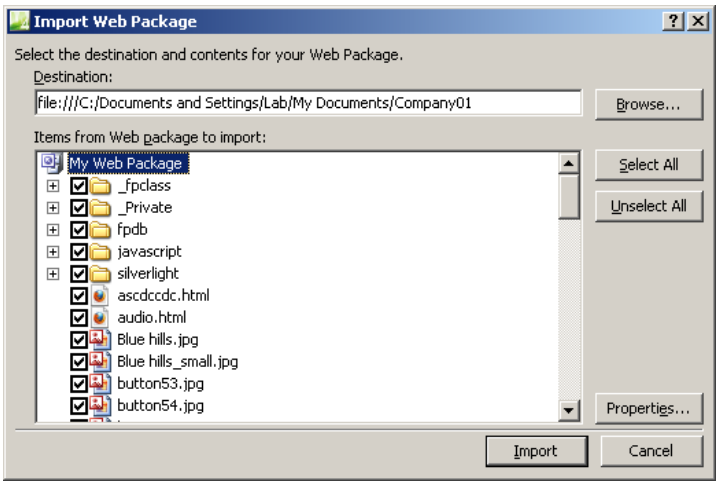
Note: To easily identify the package, replace the date by specifying current date or a version number.



Importing Web Package

If you want to import this web package on another computer, do the following:

1. Create a New Site (Empty Site), name this website for example: ***MySecondWebsite***.
2. Select ***Site > Import > Import from Web Package…*** (Figure above).
3. Browse and select the Web Package, select ***Open***. The ***Import Web Packag*** dialog box appears (Figure adjacent).
4. You can either select



individual files or folders, or the entire website. Click ***Import***.

5. Select ***Yes to All***. Click ***OK***.

Now you can edit web pages within this website. Also you can keep a copy of the Web package as a backup for future use.

Backup Websites

It is a highly recommended practice to take periodic (daily, weekly, etc.) backups of websites either using special backup tools or publishing it to another internal source. Whenever you attempt to perform an update on a website, ensure you take a backup of the current site before touching it.

If you only have HTML content (static web pages), use the following procedure to take a backup of the website:

1. Go the location where your website is stored (default location is My Documents).
2. Select the folder that has the complete website.
3. Copy and paste it in another location such as a pen drive or to a folder on another computer.

EXERCISE

Perform the following activities till you are confident:

<table>
<tr><th>S.No.</th><th>Activities</th></tr>
<tr><td>1.</td><td>Compare different hosting providers using the worksheet below:
<table>
<tr><th>Feature</th><th>Provider 1</th><th>Provider 2</th><th>Provider 3</th></tr>
<tr><td>ISP</td><td></td><td></td><td></td></tr>
<tr><td>Monthly Price</td><td></td><td></td><td></td></tr>
<tr><td>Setup Fee</td><td></td><td></td><td></td></tr>
<tr><td>Disk Space</td><td></td><td></td><td></td></tr>
<tr><td>Monthly Traffic</td><td></td><td></td><td></td></tr>
<tr><td>Ads</td><td></td><td></td><td></td></tr>
<tr><td>Languages</td><td></td><td></td><td></td></tr>
<tr><td>ASP</td><td></td><td></td><td></td></tr>
<tr><td>PHP</td><td></td><td></td><td></td></tr>
<tr><td>Databases</td><td></td><td></td><td></td></tr>
<tr><td>Access</td><td></td><td></td><td></td></tr>
<tr><td>MySQL</td><td></td><td></td><td></td></tr>
<tr><td>Microsoft SQL</td><td></td><td></td><td></td></tr>
<tr><td>Email</td><td></td><td></td><td></td></tr>
<tr><td>POP3 / SMTP</td><td></td><td></td><td></td></tr>
</table>
</td></tr>
</table>

	IMAP **Web Mail** **Sub-domains** **Templates** **FTP Access** **Static IP address**	
2.	Backup the website: a. Use Web Package to create a single web package file and store it elsewhere. b. Copy the entire website to another location on your hard disk drive.	

ASSESSMENT

Answer the following questions:

1. Explain the purpose of Web packages with an example.

Fill in the blanks:

1. Publishing Settings is available in ____ menu.
2. Web package option should be accessed from _____ menu.
3. Import from Web Package is available in _____ dropdown menu of ____ menu.

SESSION 22: AUTHORING TOOLS

Learning Objectives:

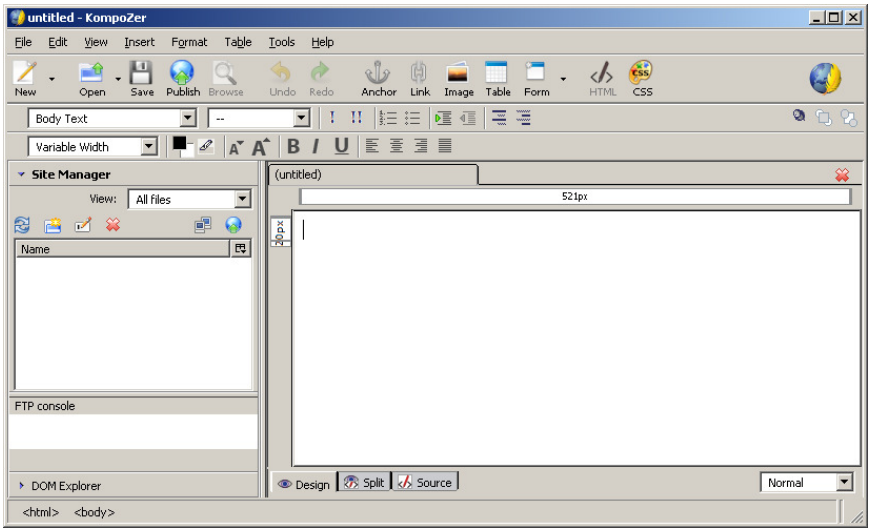
At the end of this session, you will be able to:

- Understand the purpose of Authoring Tools.
- Understand the purpose of KompoZer.
- Understand the purpose of Macromedia Dreamweaver.

RELEVANT KNOWLEDGE

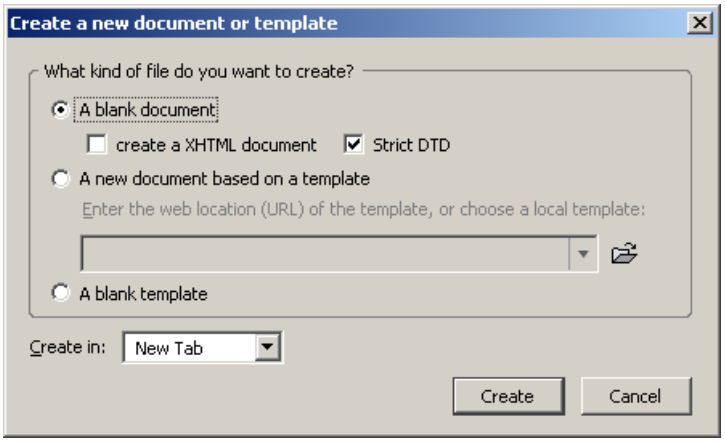
You have learnt to work with Expression Web in earlier sessions. There are a variety of other web authoring tools available for use and most of them have similar functionality. Some of the popular authoring tools are discussed in this module.

KompoZer



KompoZer is an open source WYSIWYG HTML editor. KompoZer complies with the W3C's web standards.

1. Download KompoZer from ***www.kompozer.com***.
2. Follow the on-screen instructions and complete installing the software.
3. Select ***Start*** > ***Programs*** > ***KompoZer***.



Note: Screen grabs are from kompozer-0.8b3.en-US.win32 (Version).

Now you have installed, create & save pages and view them using different web browsers.

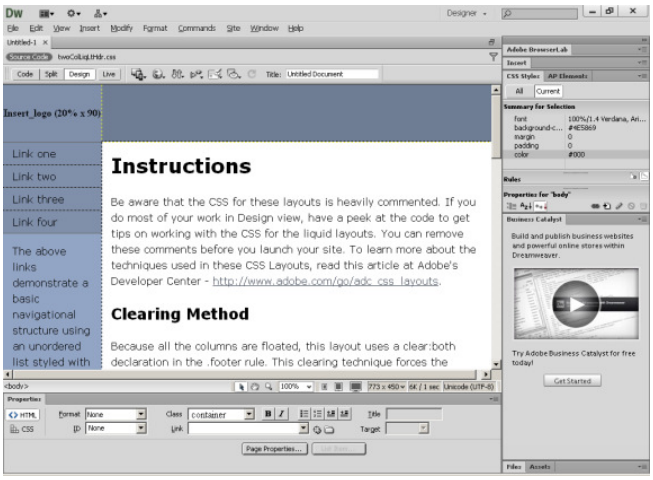
To create a page using KompoZer, do the following:

1. Select ***File > New…***. The ***Create a new document or template*** dialog box is displayed (Figure above).
2. Select ***A blank template***, select ***Create***.
3. Type some content, select ***Source*** to view the source code.

Use the help file (F1) to learn about using KompoZer.

Dreamweaver

Adobe Dreamweaver is another popular authoring tool used widely. Adobe Dreamweaver supports a variety of scripting languages such as JavaScript, VBScript, ASP.NET, PHP, etc. apart from standard support for HTML & CSS.



1. Download Trial edition of Dreamweaver from adobe.com.
2. Follow the on-screen instructions and complete installing the software.
3. Select ***Start > Adobe > Dreamweaver***.

Use the help file (F1) to learn about using Adobe Dreamweaver.

EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Download, install and work with NetObjects Fusion.

ASSESSMENT

Answer the following Questions

1. List any three web authoring tools.
2. Compare the features of at least two web authoring tools.

SESSION 23: CSS TEMPLATES

Learning Objectives:
At the end of this session, you will be able to:

- Download and use CSS templates.

RELEVANT KNOWLEDGE

Designing a good looking interface can be quite difficult at times as it requires creativity. Also you need to learn additional software to create such designs while focusing on delivering websites that are standard complaint.

When you design websites, you don't have to design a web page from scratch. You can use templates that are available for free or a free to save time and efforts. Though you have learnt to create templates using HTML editors, you can still find and use creative designs for your websites.

CSS Templates

Instead of creating dull and boring websites, you can use templates that are available on the Internet. Popularly referred to as ***CSS Templates*** or ***XHTML/CSS Templates*** these templates look attractive while meeting certain standards. Following is a list of websites that offer such templates for your reference:

- http://html5up.net
- http://www.cssportal.com/css-templates/
- www.freecsstemplates.org
- www.free-css.com
- www.templatemo.com
- www.oswd.org
- www.openwebdesign.org
  and many more….

To use a CSS template, do the following:

1. Visit any of the website mentioned above (or use a search engine to locate one).
2. Browse and select a template.
3. Most website provides an entire site structure consisting of web page(s), style sheets and accompanying images as a single compressed package. Download the compressed file and unzip them to a folder. Also you may notice a link for

live preview that allows you to view the template in action before downloading. Always check the design before you download.

4. Once the download is over, open the homepage. Homepage is usually titled with names as index.htm, default.htm or home.htm.

Note: Some website may require you to sign up and even have certain terms and conditions. Check the website for requirements.

Customizing templates

You can use a simple text editor to modify the template. However, if you find it difficult, you can use an HTML editor such as MEW. Also note that if the template is of a recent standard and if the HTML editor does not support that standard, entire template will appear distorted. Confirm if the HTML editor support the standard used in a template.

To work with a template using MEW, do the following:



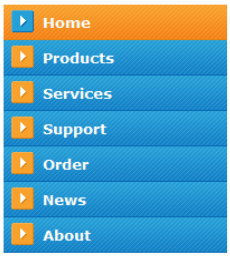
1. Launch MEW.
2. Create a New Site (always test the template in a new website).
3. Copy all the files from the template folder (or use import wizard).
4. Paste in within the HTML editor (You may receive prompt for files to be overwritten, click Yes).
5. Open the Homepage (index or default.htm) (Figure above).
6. Customize the website.
7. To view the source code, select **View > Page > Code.**

Following is provided as a courtesy:

CSS can also be used for developing attractive navigation menus (Figures below).

You can use CSS Tab designer (http://www.highdots.com/products/css-tab-designer/) to create navigation menus such as the ones above.





EXERCISE

Perform the following activities till you are confident:

S.No.	Activities
1.	Download a CSS template. Use this template as a design for the website created in earlier sessions.
2.	Download CSS Tab designer, create a navigation menu for a website.

ASSESSMENT

Answer the following Questions

1. Explain the purpose of using CSS templates.

Fill in the blanks

1. List any three websites that offer free CSS templates (write complete URL).
    a. _____.
    b. _____.
    c. _____.

SESSION 24:OVERVIEW OF WEB APPLICATIONS

Learning Objectives:
At the end of this session, you will be able to:

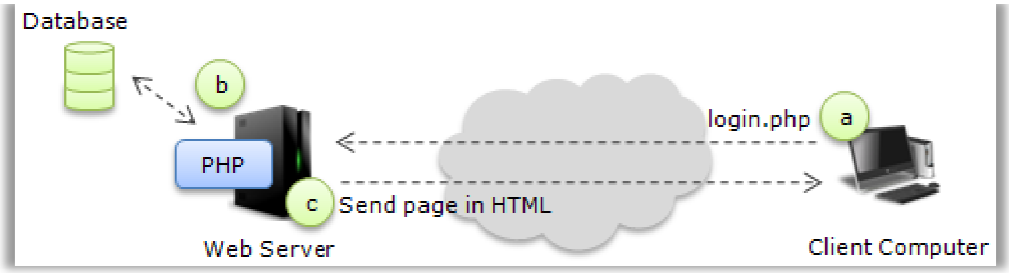
- Setup common web applications.

RELEVANT KNOWLEDGE

You have learnt about web designing using HTML, CSS & Microsoft Expression Web. These are sufficient for creating basic web pages or websites.

You may have noticed several websites such as blogs, forums, news, etc showing dynamic content. Most websites integrate blogs or forums to cater to their additional customer needs (for example: handle customer queries or provide assistance in using their products). This is in addition to providing information about their products or services through static pages.

Such websites require a special setup such as database server and web server supporting a server-side scripting language. Server-side scripting language helps in processing code at the web server; for example, a web server needs to have **PHP interpreter** installed for processing PHP code as illustrated below:



a. Client computer sends login request to web server.
b. Web server validates login details in the database server through PHP code.
c. Web Server responds in plain HTML to the client computer.

Whether it is a blog application or a forum web application, most websites today operate by making use of:

- A server-side scripting language to store and/or retrieve items from a database
- A client-side scripting language to display results to visitors.

Combining both the power of client-side scripting and server-side scripting languages, you can create a website that provides best, rich-in-class experience for visitors.

Every dynamic website requires a database for storing data, commonly referred to as a "back-end". Depending on the complexity of a business requirement, a database engine is selected. You can use different databases such as Microsoft Access, SQL Server, Oracle Database Server, OpenOffice.org Base, etc. In general, you can use ANY back-end (database) with a front-end (server-side scripting language). Most popular combinations include:

- Microsoft ASP & Microsoft SQL Server
- PHP & MySQL
- JSP (Java Server Pages) & Oracle Database Server

Developing web applications requires additional learning, practice and references. However, there are several Open Source applications available ready-made ranging from simple scripts (stock tickers, news tickers) to complex applications (forums, blogs, learning management systems, content management systems, etc).

Since the applications dealt in this session are open source, you may download the source code to learn about how the application works behind the scenes!

Note: Though there are open source applications available, web applications dealt in this session make use of PHP & MySQL, one of the most common and popular combination. You may download other web applications post this session.

Content management systems

Content management systems are web applications designed to manage text, graphics and multimedia content. You have already learnt to create blogs, one of the most common web application used by millions of users across the globe. You can use any of the popular ready-made content management systems to setup a blog or a news website. Some of them include:

• Joomla • WordPress • Moodle • MediaWiki • Atutor	• DotNetNuke • mojoPortal • Umbraco • Mambo • PHP-Nuke

Internet forum

Internet forum refers to the online discussion websites where people exchange conversations in the form of messages. Forums usually have:

- **Users**, who post questions or comments

- **Moderators**, who regulate (post or remove threads)
- **Administrator**, who manage the forum.

Users submit their message to forums referred to as a "**Post**". Users can also modify their posts or reply to other posts, thus creating an interactive experience on the Web. Some of the most popular forum systems include:

• phpBB • vBulletin • PHPWind	• Phorum • vBulletin • ASPNetForum

Note: You may also find complete packages with integrated blogs and/or forums. Do some research on the features to learn more.

PHP

PHP or **H**ypertext **P**reprocessor is a widely used open source scripting language. PHP is popular more as a server-side (web based) scripting language though it falls in to the general purpose programming language category.

Web pages with PHP code are processed by a web server before it is sent to a web browser (as it is a server-side scripting language).

Using PHP, you can write code to:

- Create dynamic web content
- Collect data (form)
- Send and receive cookies
- Add, delete or modify data in a database
- And many more….

MySQL

MySQL is an Open Source RDBMS and is the most popular choice for databases in web applications. Features of MySQL include:

- Cross Platform (available for Windows, Linux, etc.)
- Multiple Languages
- Many built-in functions right out-of-the-box
- ACID compliance and many more.

Note: You have learnt work with databases software earlier using statements such as Select, Create, etc.; most RDBMS software support similar statements including

Microsoft SQL Server, MySQL, etc. If you are familiar working with SQL statements with any RDBMS, you will find that working with MySQL is almost the same.

Installing PHP & MySQL

To work with these web applications, you need to have the following installed:

a. A web server such as Apache or Internet Information Service web server.
b. PHP 5.4 (or above)
c. A database server such as MySQL, Microsoft SQL Server, etc. (if you want to design database-driven web applications).

Since installing and configuring the above mentioned components can be tedious, you may download a software stack such as WAMP to simply the process.

WAMP

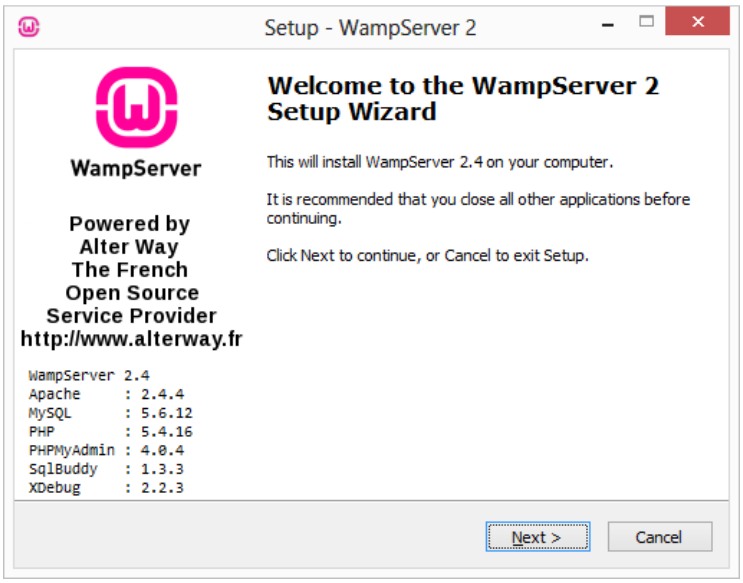
WAMP or "**W**indows **A**pache **M**ySQL **P**HP" refers to software stack that consist of Apache, MySQL & PHP as a single package and runs hassle free on Microsoft Windows. Generally installing individual components may take time and requires additional technical skills. WAMP makes it easy by installing the whole package in a single shot.

Software	Version
Apache	2.4.4
MySQL	5.6.12
PHP	5.4.16
PHPMyAdmin	4.0.4
SqlBuddy	1.3.3
XDebug	2.2.3

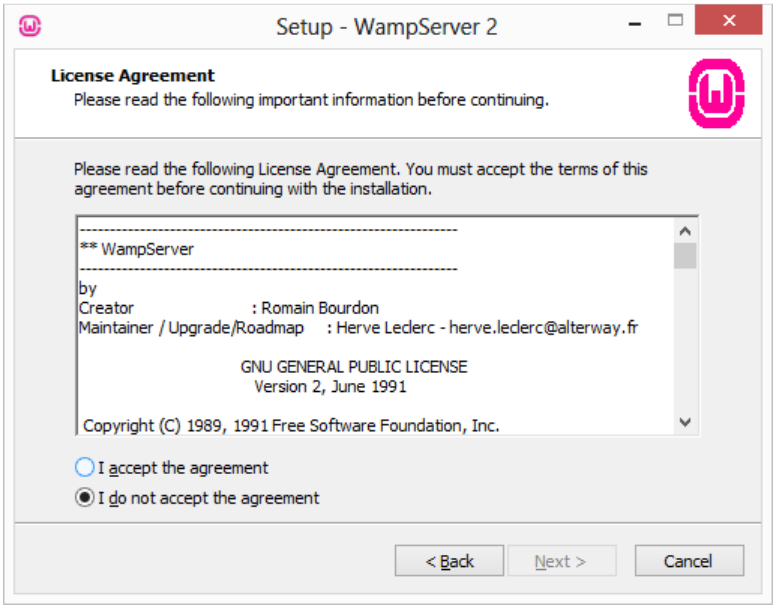
Note: Though these applications can be installed without WAMP, instructions provided in this session are WAMP based as it is much simpler and easier to make it functional. LAMP (Linux Apache MySQL PHP) may be used on Linux based computers.

Downloading and Installing WAMP

1. Download WAMP (Wampserver2.4-x86.exe) from the following address: http://sourceforge.net/projects/wampserver/files/WampServer%202/Wampserver%202.4/.

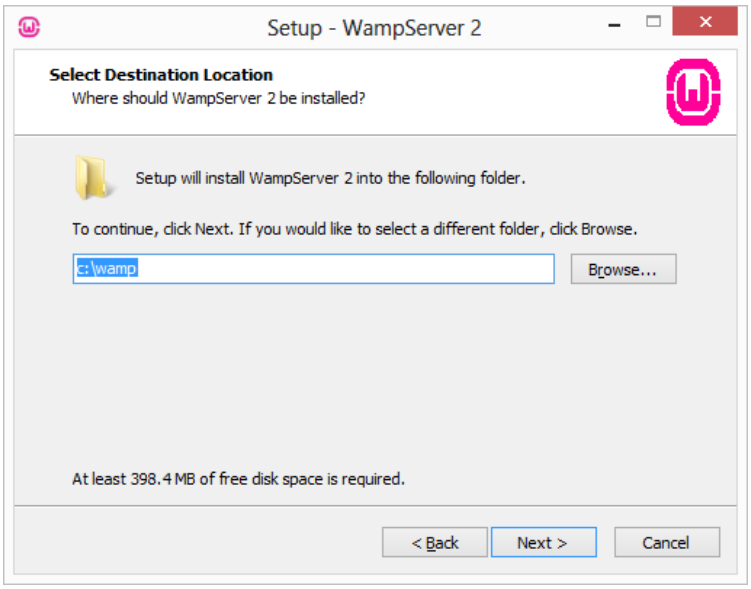


2. Go the downloaded folder and double-click **Wampserver2.4-x86.exe**. **Welcome to the WampServer 2 Setup Wizard** appears (Figure above).

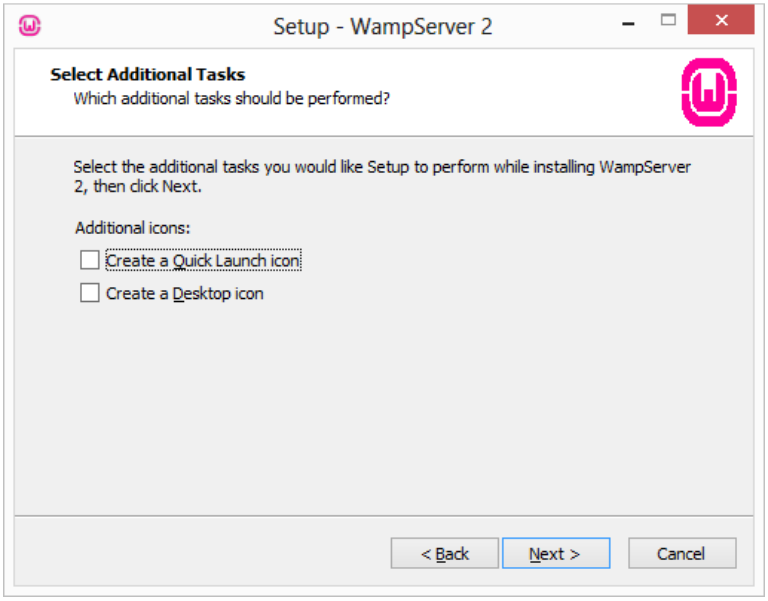


3. Click **Next**. **Licence Agreements** section appears (Figure above).

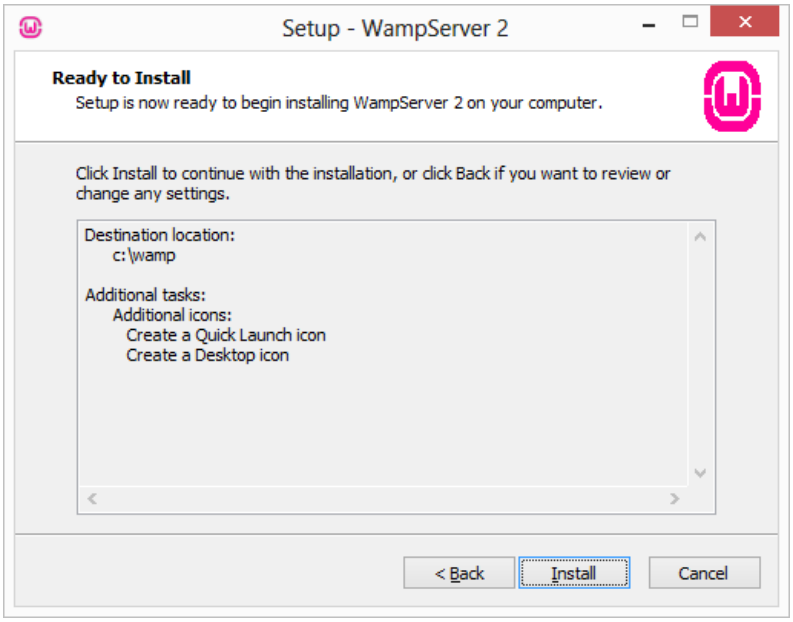
4. Select **I Accept the agreement** and click **Next**.



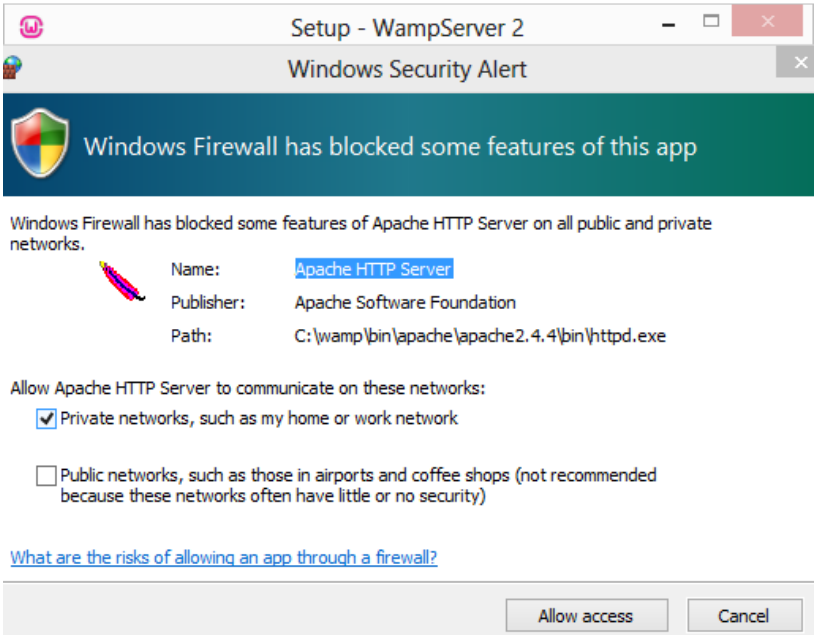
5. Leave the default installation location as it is, click **Next**.



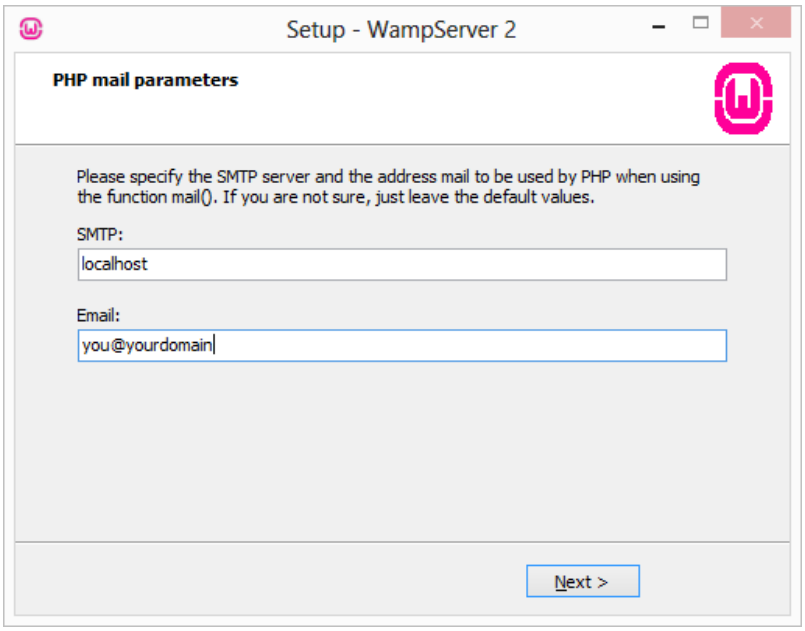
6. To add shortcuts, check both **Create a Quick Launch icon** and **Create a Desktop Icon**. Click **Next**.



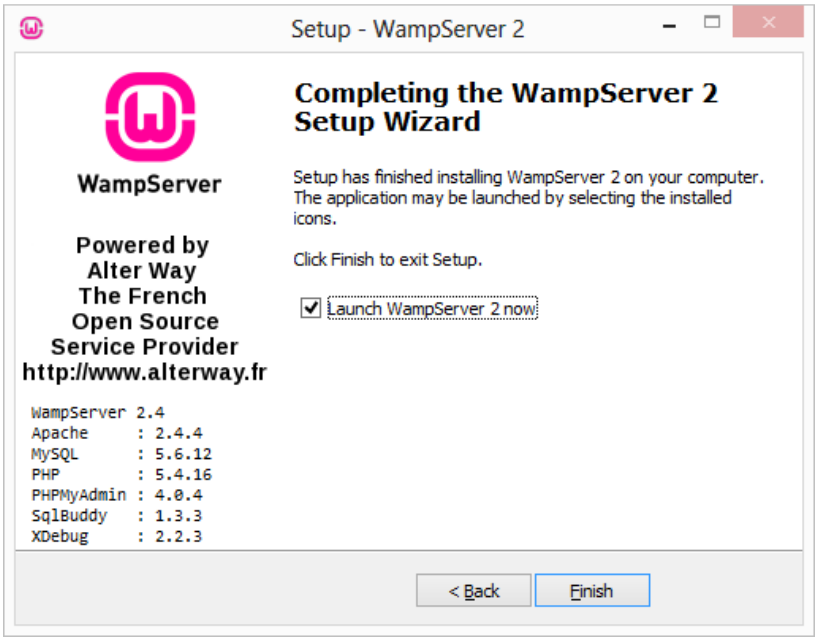
7. Click **Install**. You may receive **Windows Security alert** similar to the one below:



8. Click **Allow access**. **PHP mail parameters** appears as shown below:



9. You may skip this section, Click **Next**.



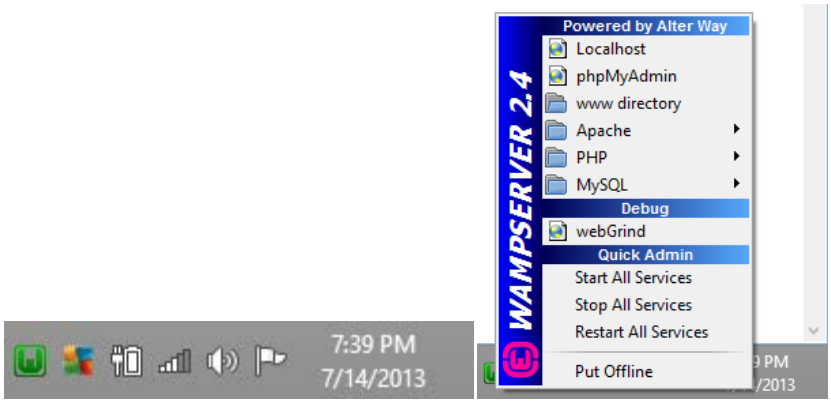
10. Click **Finish**.

Testing WAMP

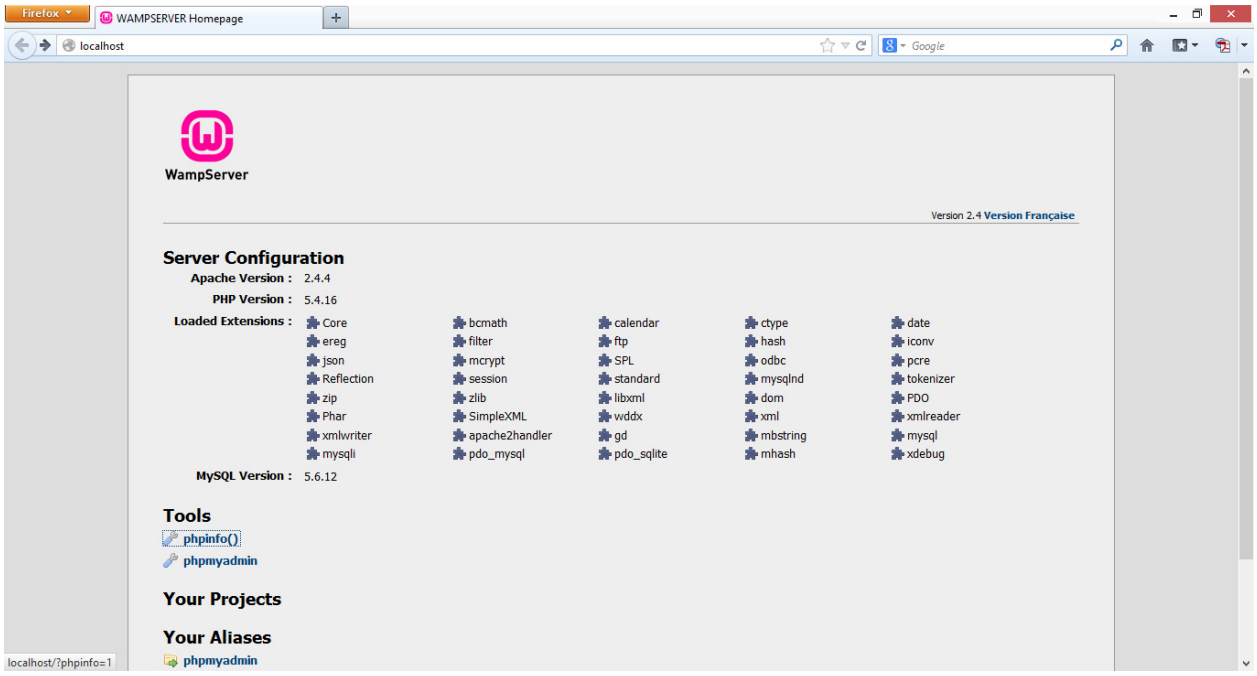
It is recommended to check if the web server is running properly. To check, do the following:

Note: If the icon is NOT available in the system tray, click **Start > Programs > start wampserver** shortcut.

1. Click the WAMP icon  in the system tray (Figure below, left). A popup appears (Figure below, right).



2. Click **Localhost**. A webpage appears similar to the one below:



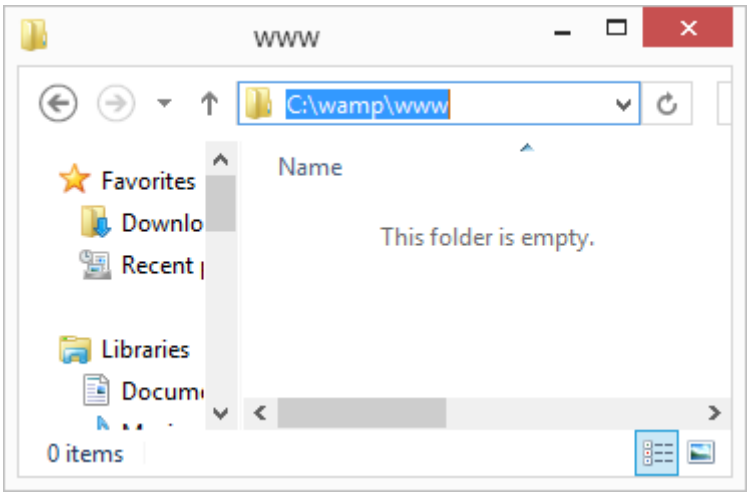
If you see this webpage, this means the web server is working fine.

Alternatively you can also open the browser and type **http://localhost** to verify web server functionality.

Publishing files

You have learnt to publish HTML files earlier; similarly, web pages containing PHP code must be published to the web server. This in turn will be served to the web browsers by the web server.

1. Click **WAMP** icon in the system tray; select **www directory**.
2. This is the default location for this website. Files saved in this location are used by the web server to be processed and sent to the web browser.



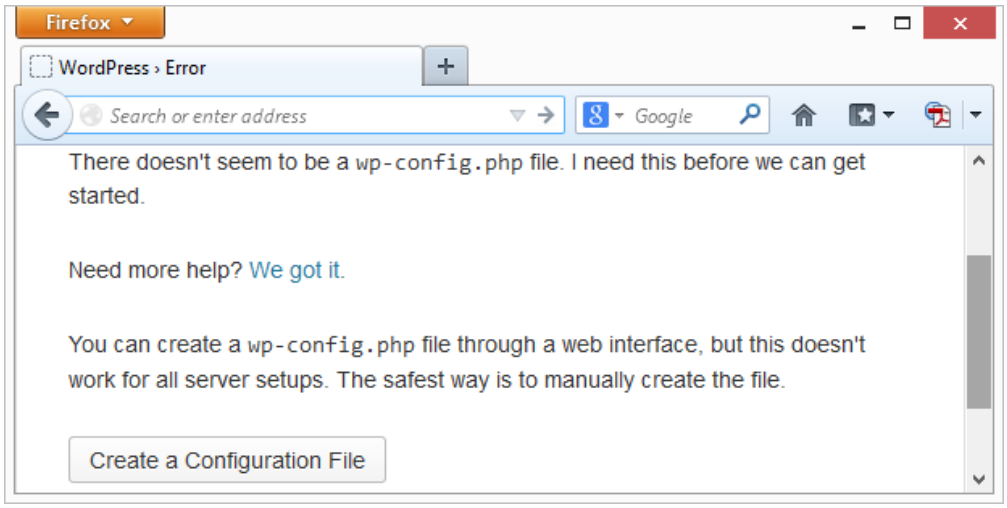
Tip: There are other stacks such as LAMP, EasyPHP, etc. You can also download Apache, PHP, MySQL separately and install them by referring to the instructions on their respective websites.

Lab: Install and work with WordPress

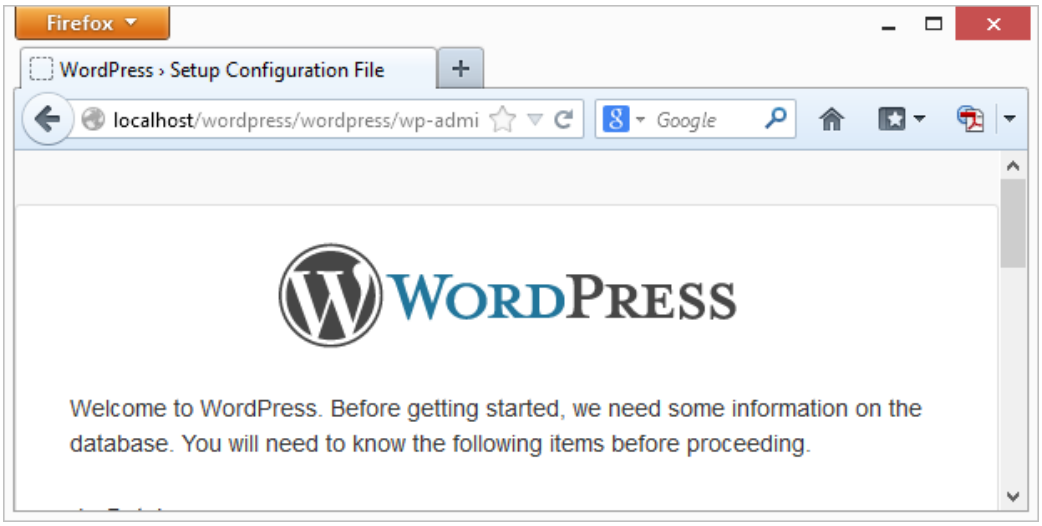
1. Download WordPress package (Open Source & Windows) from http://wordpress.org/. Save the file to a folder in your computer.
2. Extract the compressed file to a folder C:\WAMP\WWW\WORDPRESS.

Important: During the extraction process, files may be unzipped to a folder under the WordPress folder causing redundant names. For example, the folder structure may look like C:\WAMP\WWW\WORDPRESS\WORDPRESS instead of C:\WAMP\WWW\WORDPRESS\. However, there is no harm in using such file system structure as it results only in a lengthier path for accessing the website.

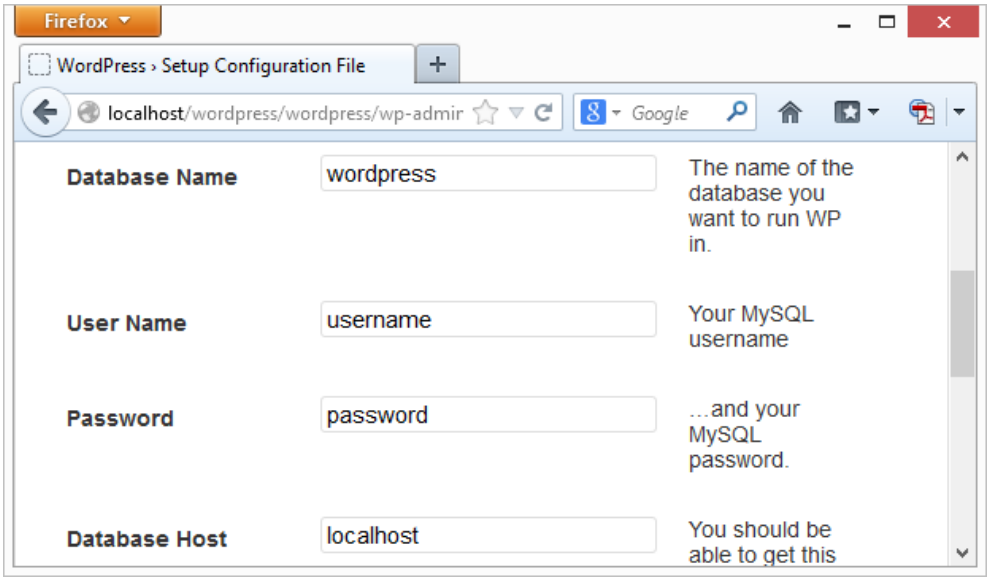
3. You need to set up a separate database for **WORDPRESS**.
    a. Click the **WAMP** icon and click **PHPMYADMIN**.
    b. Click **Databases**.
    c. Type a name in **Create Database** textbox. For example, **WORDPRESSDB**.
    d. Click **Create**.
4. Open the web browser and type **http://localhost/wordpress/wordpress/** and press **Enter**. A web page appears (Figure below).



5. Click **Create a configuration file** button. A web page appears (Figure below).



6. Scroll down to the end of this page and click **Let's Go** button. A web page appears (Figure below).

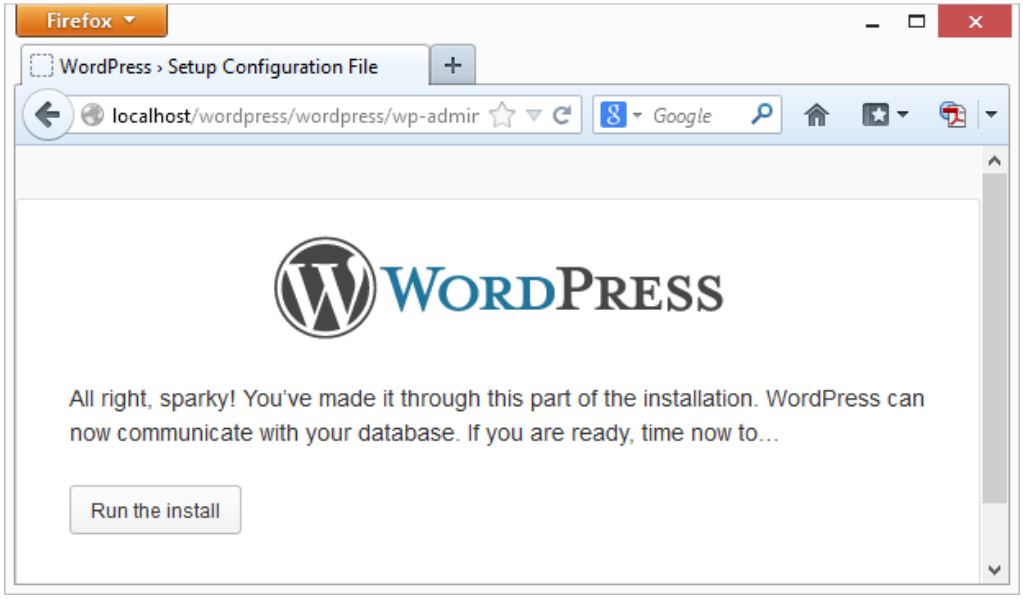


a. Type **"WORDPRESSDB"** in **Database Name**

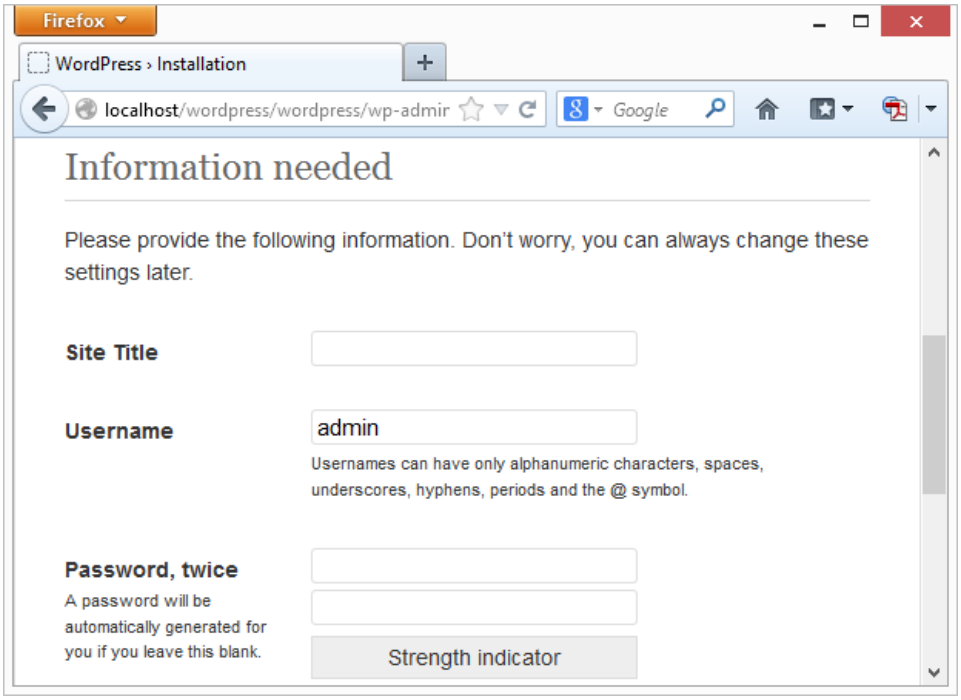
b. Type **"root"** in **User Name**

c. Type the password in **Password** (replace password to blank if there is no password).

d. Scroll down to the end of the page and click **Submit**. A web page appears (figure below).



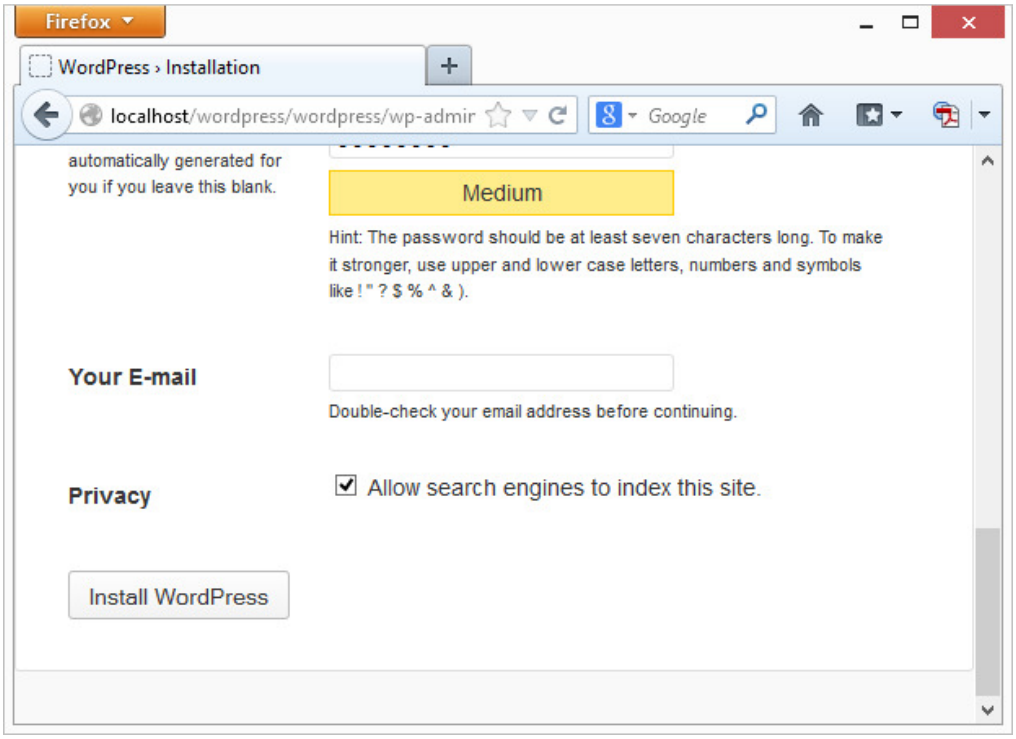
e. Click **Run the Install** button. A web page appears (figure below).



f. Type a name for this blog in **Site Title**, for example YOURNAME_BLOG

g. Type your name in **Username**

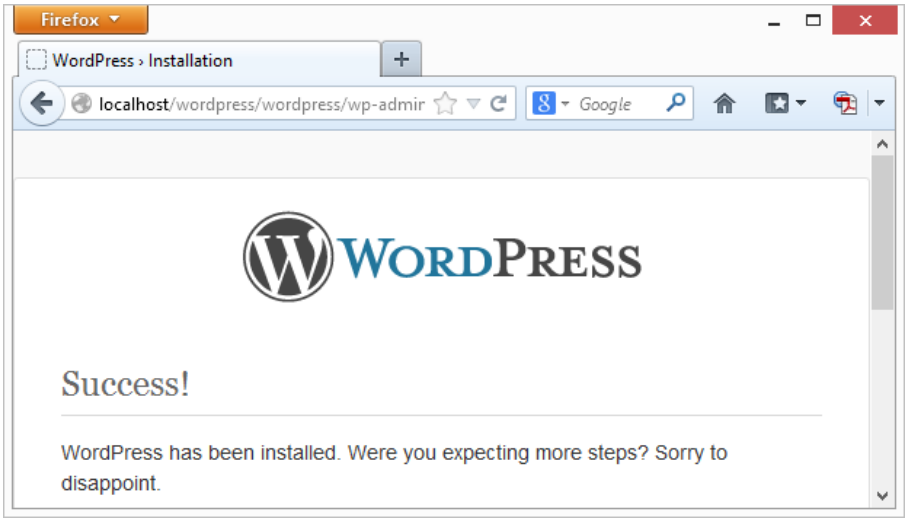
h. Type password in **Password, twice** text boxes



i. Type your email address in **Your E-mail**

j. Uncheck **Allow search engines to index this site**

k. Click **Install WordPress** Button.

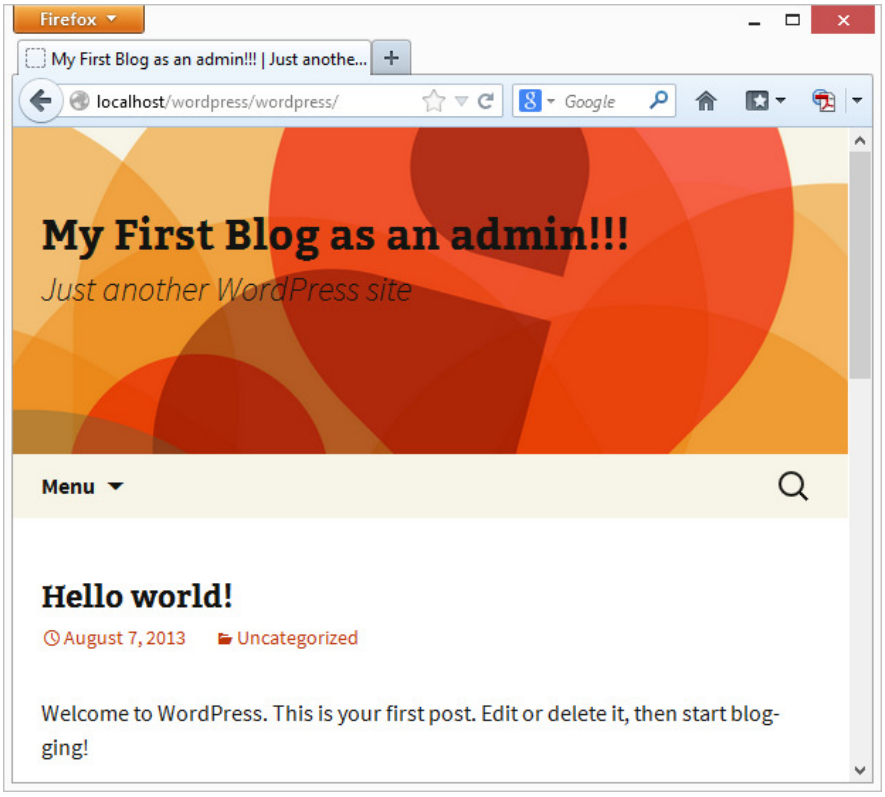


7. A web page appears similar to the one adjacent.

8. Now close this window.

Accessing the blog

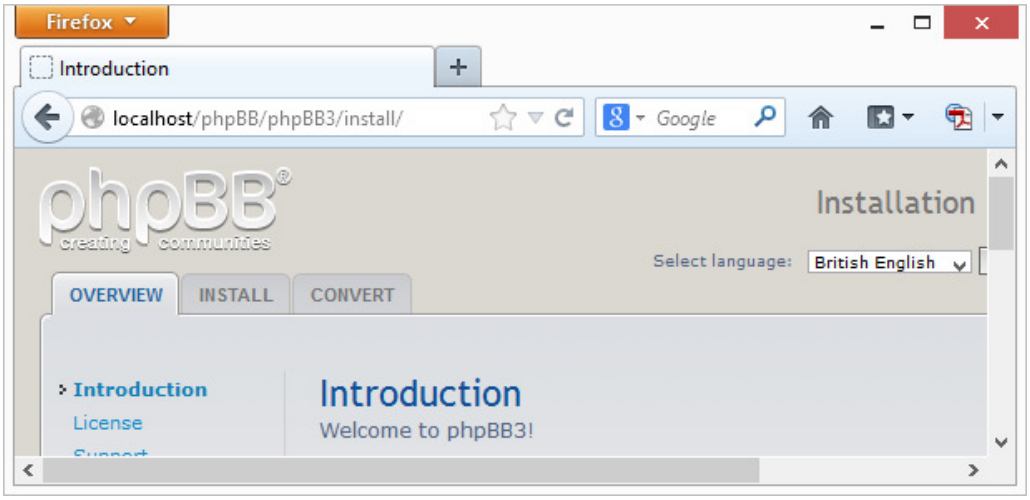
1. Open the web browser and type **http://localhost/wordpress/wordpress** and press **Enter**. Your blog is setup (Figure below).



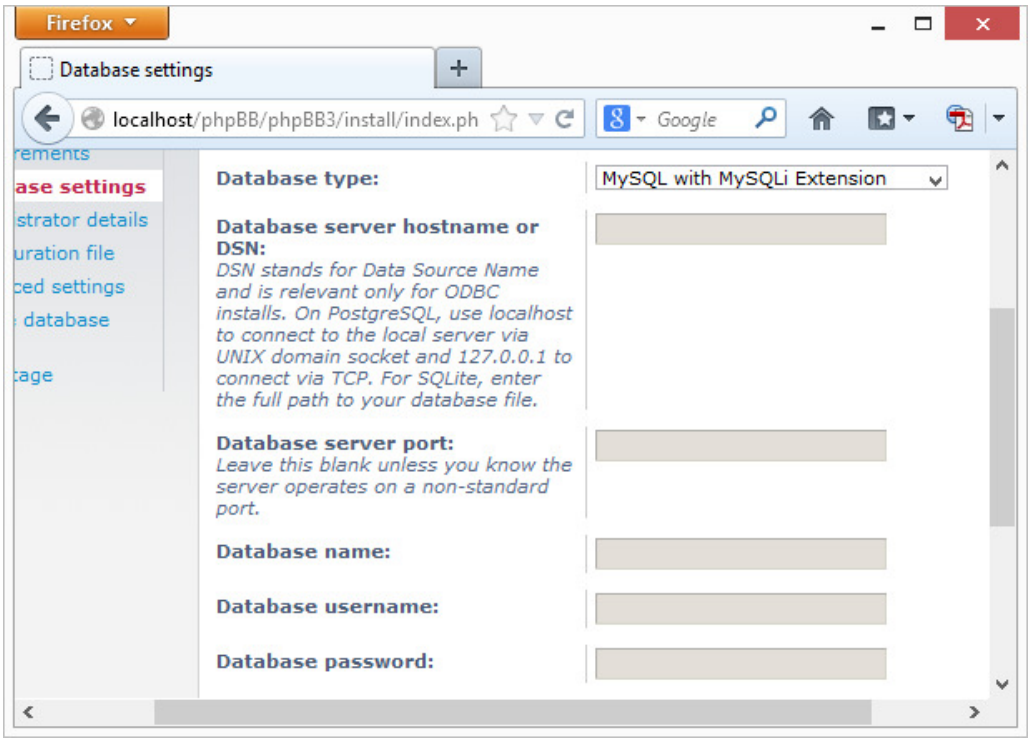
2. Now login and work with this blog to learn more.

Lab: Install and work with PHPBB

1. Download **PHPBB** package (Open Source) from https://www.phpbb.com/. Save the file to a folder in your computer.
2. Extract the compressed file to a folder **C:\WAMP\WWW\PHPBB**.
3. You need to set up a separate database for **PHPBB**.
    a. Click the **WAMP** icon and click **PHPMYADMIN**.
    b. Click **Databases**.
    c. Type a name in **Create Database** textbox. For example, **PHPBBDB**.
    d. Click **Create**.
4. Open the web browser and type **http://localhost/phpBB/phpBB3/install** and press **Enter**. A web page appears (Figure below).



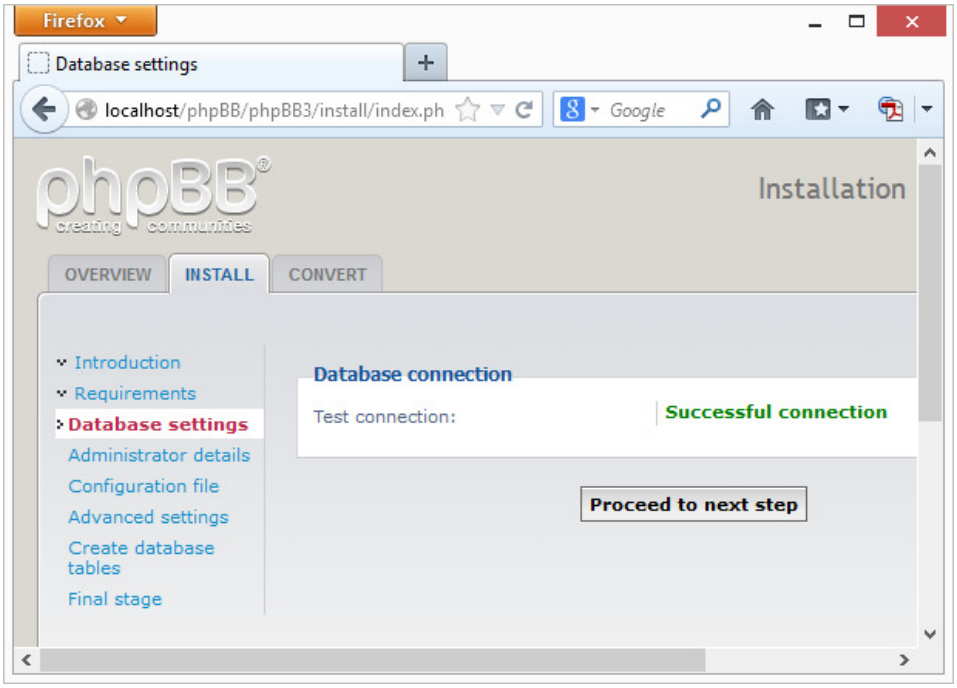
5. Select **Install** Tab.
6. Click **Proceed to Next step** button located at the bottom of the web page.
7. **Installation Compatibility** web page appears, scroll down to the bottom of the web page and click **Start Install** button. A web page appears (Figure below).



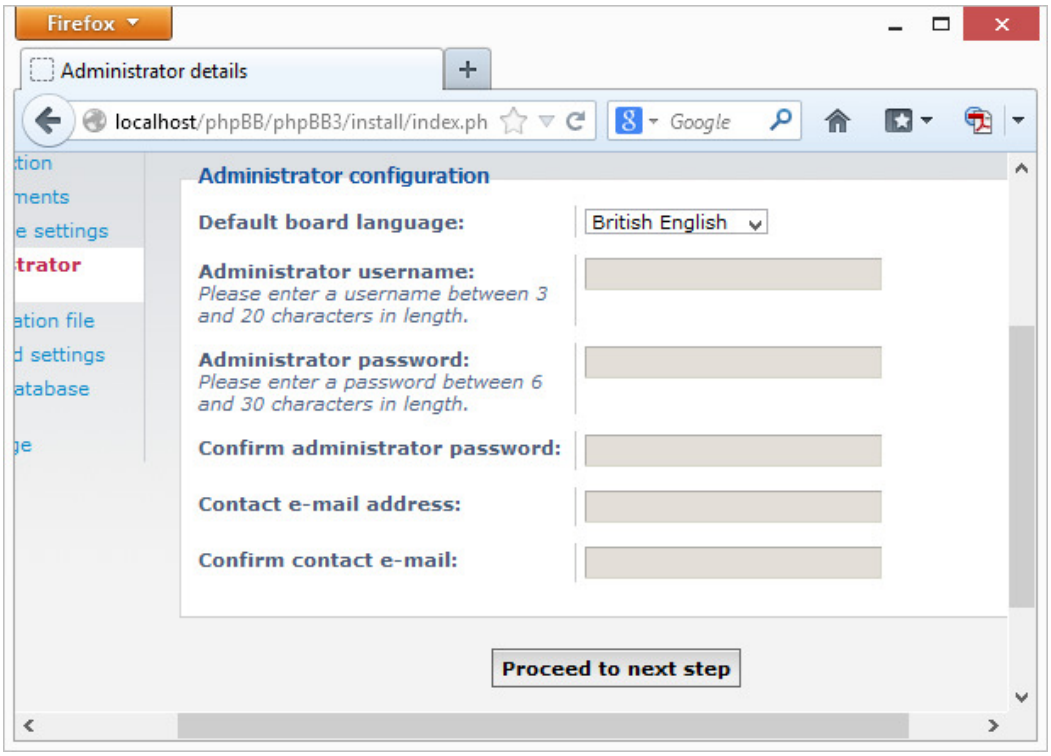
a. Type **PHPBBDB** in **Database name:**

b. Type **"root"** in **Database username:**

c. Click **Proceed to next step** button at the bottom of the web page. **Database connection** web page appears (figure below).



d. Click **Proceed to next step** button. **Administrator configuration** web page appears (Figure below).



e. Type your name in **Administrator username:**

f. Type a password in **Administrator password:** and **confirm administrator password:** fields.

g. Type your email address in **Contact e-mail address:** and **Confirm contact e-mail:** fields.

h. Click **Proceed to next step** button.

i. **Administrator details** web page appears, Click **Proceed to next step** button.

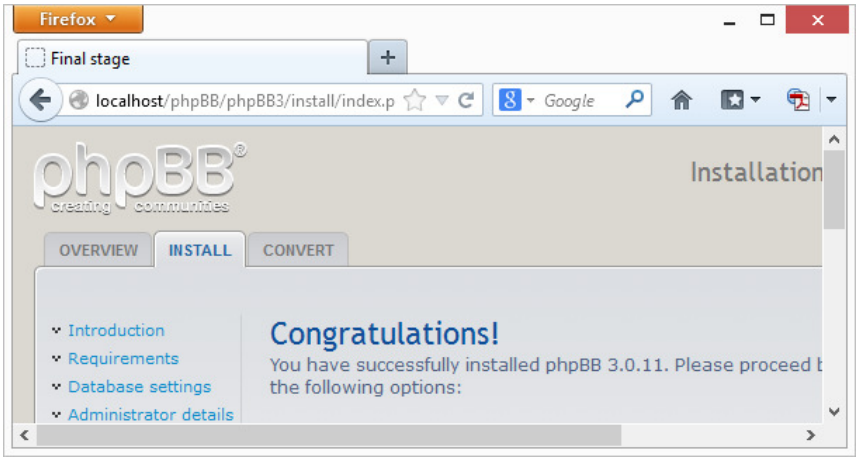
j. A confirmation web page appears, Click **Proceed to next step** button.

k. E-mail settings and Server URL Settings web page appears (do not alter any settings). Click **Proceed to next step** button.

Note: Installation may take a while.

l. A confirmation web page appears, Click **Proceed to next step** button.

m. **Final Stage** web page appears (Figure below).

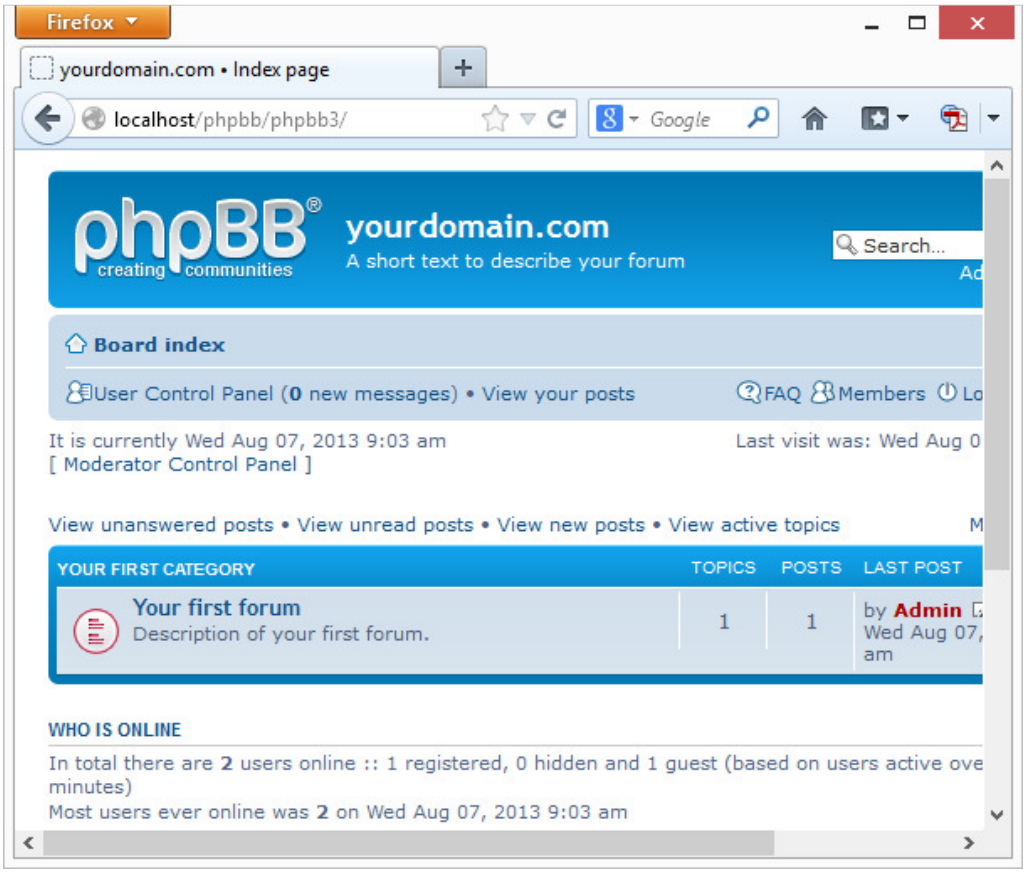


8. Now the forum is ready for use. Close this window.

Important: You need to remove the **"Install"** folder. Go to **C:\wamp\www\phpBB\phpBB3** and delete the **"Install"** folder post installation.

Accessing the forum

1. Open the web browser and type **http://localhost/phpbb/phpbb3** and press **Enter**. Notice the forum appears! (figure below).

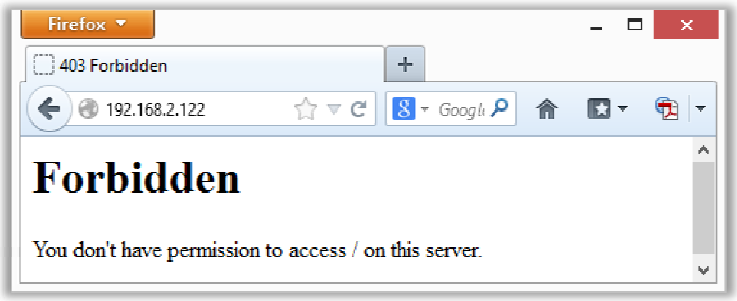


2. You can now login or register as a new user, etc. Use the help file to work with the forum.

Though you have learnt to install WordPress and PHPBB using WAMP, you can also try installing with other software environment or through a web hosting provider since the procedure is more or less the same. Most web hosting providers provide a detailed step-by-step instruction on setting up blogs or forums; refer to their knowledgebase for details if hosting on the real-time environments.

Accessing the website from other computers

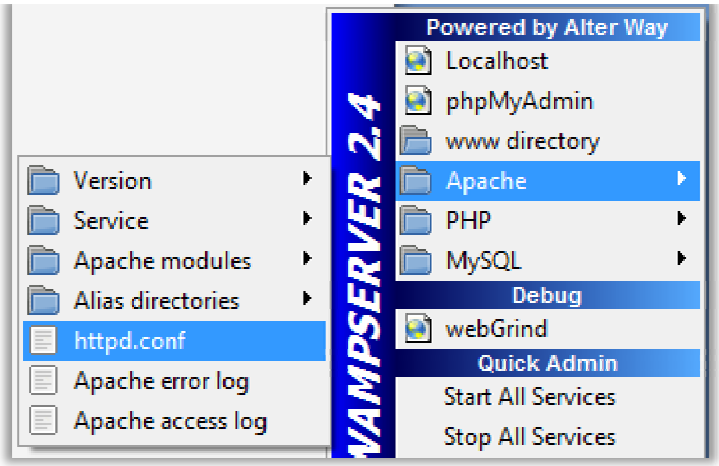
So far you have been working on the local computer using http://localhost as the URL. If you attempt to access the website using the computer's IP address in the address bar or from another computer, you may notice the adjacent message.



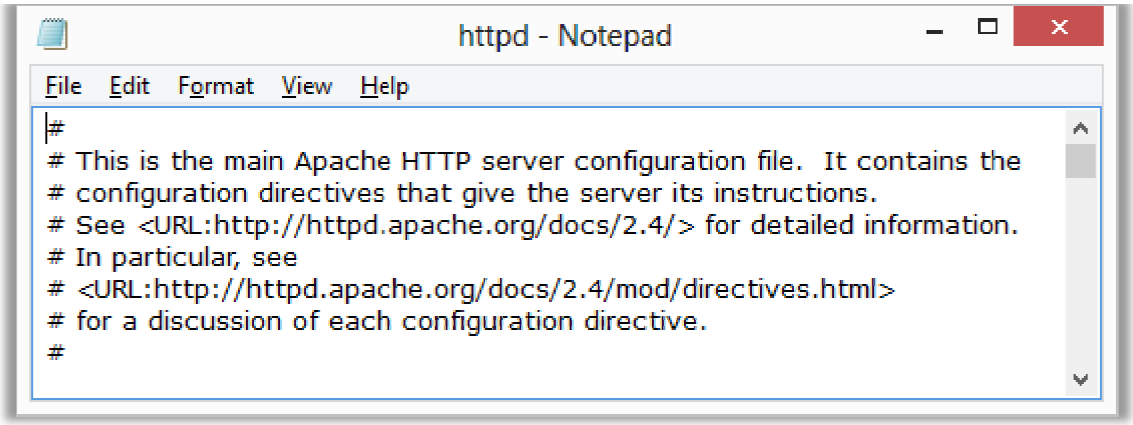
You need to modify the security settings to remove this restriction on the web server. You have been using Apache web server; settings of Apache web server are stored in the configuration file named "httpd.conf" located in C:\wamp\bin\apache\Apache2.4.4\conf folder.

You can access this file by,

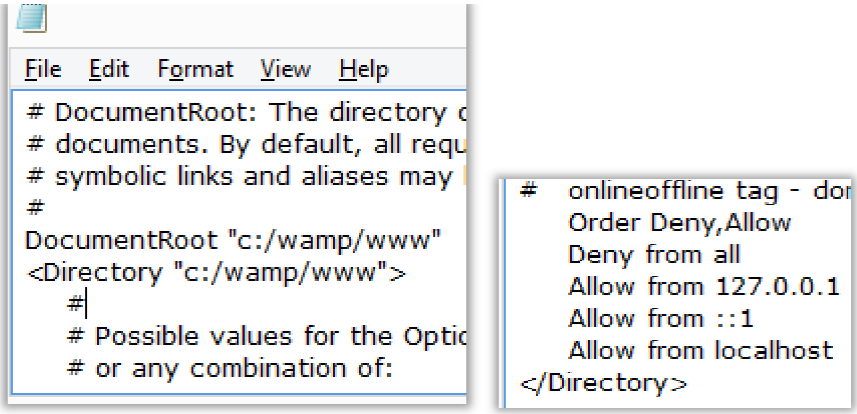
1. Click on the **WAMP** icon (System tray), a popup appears (figure below)



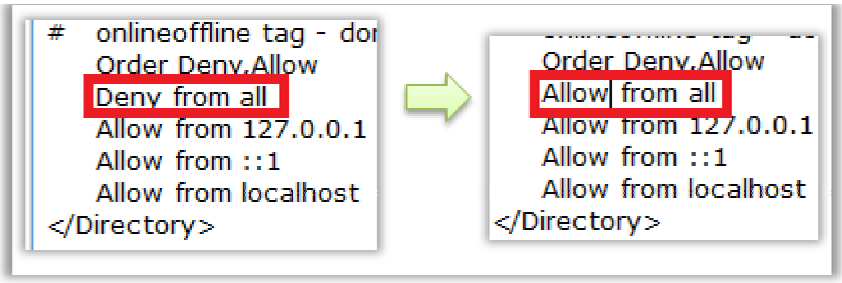
2. Select **Apache > httpd.conf** (figure above). The configuration file **httpd.conf** opens in a text editor (notepad) as shown below:



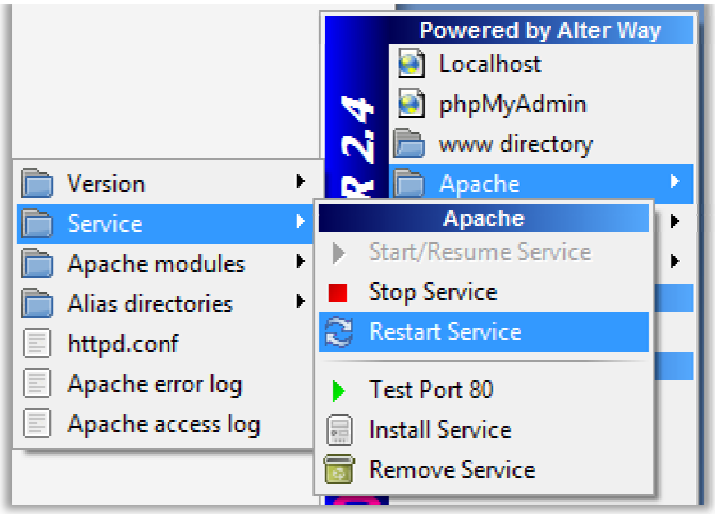
3. Scroll down to the **<Directory "c:/wamp/www">** section (figure below, left), at the end notice the settings (figure below, right).



4. If you observe, the value is set as "**Deny from all**". To allow access, it should be changed to "**Allow from all**" (figure below).



5. You need to restart the web server to apply changes. Click on the **WAMP** icon, a popup appears.



Select **Apache > Service > Restart Service**. Now try accessing this computer from other computers in your network using the IP address or computer name to view the websites.

You have learnt to setup a blog and a forum in this session; you can try downloading and installing blogs / forums or web applications from the Internet. Always refer to the detailed instructions on respective website for downloading, installing and using them.

If you sign-up with web hosting providers, usually the steps are much simpler and may be very similar to set it up in the real-time. Instructions for the same is also available in the website; contact the technical support if you need assistance.

SESSION 25: BASICS OF WEB PAGE AND WEB APPLICATIONS DEVELOPMENT

Lesson Objectives:

At the end of this session, you will be able to:

- Understand the concept of Web Page Development.
- Understand the concept of Web Application Development.
- Understand the basics of .NET platform.

RELEVANT KNOWLEDGE

Web page development

Web page development refers to web pages that use client-side technologies such as HTML, CSS, JavaScript, etc. Web Pages served by a web server are processed by a web browser such as Mozilla Firefox, Microsoft Internet Explorer, etc at the client end.

As you already know, HTML is used to format data on a page and serves to lay out contents in a Web page. When the client browser receives a HTML document it converts the document to a screen display. CSS is used to separate *the text* that is displayed from *the manner (style)* in which it is displayed. CSS is used to improve flexibility and control over the manner in which the content is presented. It provides an efficient way to ensure that multiple pages share the same type of formatting. It also allows for creation of dynamic content. JavaScript is used for adding functionality and enabling user interactivity.

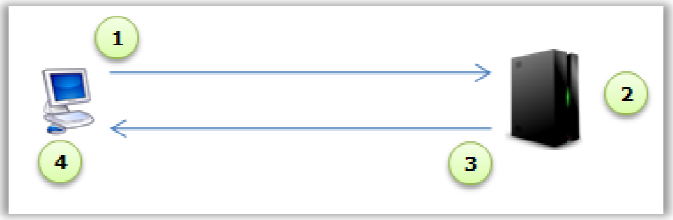
Web application development

To develop web applications, you need IDE's such as **Microsoft Visual Studio** or **Microsoft Visual Web Developer 2010 Express (Free)**. Although you can use simple text editors such as Notepad, it is recommended to use an IDE for faster development with fewer errors.

Web application development refers to web pages generated by a web server using server-side technologies such as ASP, ASP.NET, PHP, etc. Web pages are processed by the web server and results are sent to the web browser for further rendering (rendering refers to a process by which a web browser executes the code sent by the web server and just display it in the web browser).

Tip: *Web Development – Client Side & Web Application – Server Side*.

Client-Server Model



Client-Server model refers to a distributed architecture where workload is shared to produce desired results. For example, look at the adjacent illustration. In this scenario when a user books a train ticket, a sequence of operations take place:

1. User opens web browser and specifies the URL **www.irctc.co.in**; the browser (client) sends a request to the web server.
2. Server receives the request and it processes any server-side scripts.
3. Server sends the results to the web browser.
4. Web browser handles further processing and displays results on the web browser.

Client-side / Server-side scripting

In a web application, the script used may be a client side script or a server-side script. A client-side script is downloaded by the browser and is executed on the client computer (user's computer) when the page is loaded. As you already know, JavaScript is a client-side scripting language that helps make Web pages interactive.

Client-side scripting represents all code that is executed in the browser, **after** the server sends the page back to the user while server-side scripting refers to all code that is executed by the web server **before** the web page is sent to the user's computer. It is to be noted that client-side scripting is completely independent of the server and server-side technologies used to process the request.

Checking the data that a user has entered into a form on a web page is a common usage of client-side scripting. While inserting data in a form, if you misspelled the email address or forgot to key in an important field or entered text into a number field, the script will warn the user about these errors. Of course, this may also be done at the server end, but that would make your application slower as it requires a round trip. Client-side scripts are more responsive and faster because they do not depend on the server and the Internet traffic between the client and the server.

Creating visual page effects (e.g. dynamically swap images on mouse over), showing more effects in the browser window, disabling the right mouse-click, scrolling text, creating online browser games, etc requires client side scripting.

On the other hand, for selecting data from a database, securing the login page, creating an online questionnaire, server side scripting needs to be used.

Hypertext Transfer Protocol (HTTP)

HTTP is an application protocol which allows a client to talk to a server. When a client computer wants to communicate with the Web server, it uses its Web browser to send a HTTP request to the Web server. The contents of the HTTP request specify what action the client requires the server to take. When requesting for a Web page, the browser uses the *GET* method and while sending data to be processed to the server, it uses the *POST* method.

An **event** is a notification which occurs in response to an action, such as a change in state, a user clicking the mouse or pressing a key while viewing the document, or user moving the mouse over a tab and causes a mouseover to occur. An **event handler** is the code, written in a scripting language, which receives control when the corresponding event occurs.

An **event model** in a Web application is a software architecture that determines how to create and describe events and trigger them on the event source side. It determines how to react to events or subscribe to event sources on the event listener side. It is to be noted that an event is **raised** on the client side and **handled** on the Server Side.

Cookies and Sessions

Cookies are information (data) stored in your web browser. When you visit websites such as ebay.com, you may have noticed items under "Items you viewed" section even when you return to the website after a few hours or days (or even when you shutdown and restart a computer); how does a website like EBAY record such information while having thousands of visitors viewing it every day? Simple, all items that you view are recorded and stored in a text file referred to as "Cookies".

When you visit the same website after sometime, the web server sends specific information to the web browser through HTTP headers. Web browsers in turn return the information stored in the text file; based on which specific items that you viewed are retrieved and displayed.

Cookies can also have expiry date and/or time; this is useful in situations when you don't want the web browser to "remember" certain details after a specific period.

Cookies are mostly used for personalization like remembering the web pages that you have visited, items that you viewed, values that you have filled in a form, etc.

Cookies can also help in manage sessions effectively by minimizing network traffic between web servers and web browsers; for example, imagine a visitor viewing first

50 items of records from a database. In this case, the web server can use cookies to track and send the next 50 items or previous 50 items depending on the value stored in the cookie instead of starting all over each time.

Note that cookies can also be stored for a specific period or removed from your computer depending on how you have configured your web browser. For example if you have set the web browser to clear cookies when it is closed, cookies are automatically deleted from your computer.

Sessions are similar to cookies that store information. Sessions are files stored on the web server for an extremely limited time span and expire when the web browser is closed.

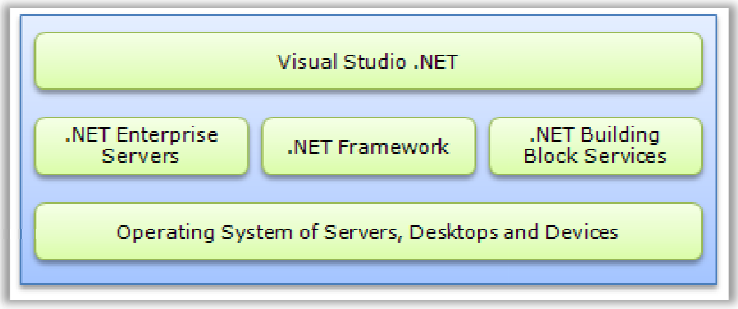
Sessions are files stored on the web server that carry unique information for each visitor; however, the information is valid only for that particular visit. For example, you may visit a website to purchase products from an online shopping website. However, you may add or remove items from the shopping cart for a while before making a purchase. In such cases, sessions are used for storing the information on the server and used when required (for example, when you proceed to checkout). Session details are removed from the web server once you leave the website or close the browser.

Imagine the number of sessions a web server managing an online shopping site like flipkart.com or ebay.com that may have thousands of visitors shopping simultaneously. Sessions are assigned through a unique string so that it does not affect sessions from other visitors.

THE .NET Strategy

The main strategy of the .NET is to enable software as a service. It also responds to the latest trends in the software industry namely:

- Distributed computing to simplify the development of client/server and n-tier applications
- Componentization to simplify the integration of software components developed by different vendors
- Enterprise services to allow the development of scalable enterprise applications without writing code to manage transactions, security or pooling



- Web paradigm shifts such as sharing of functionality across the Web among different platforms, devices and programming languages.
- Support for interoperability, scalability, availability, security and manageability of commercial web applications.

The .NET Platform

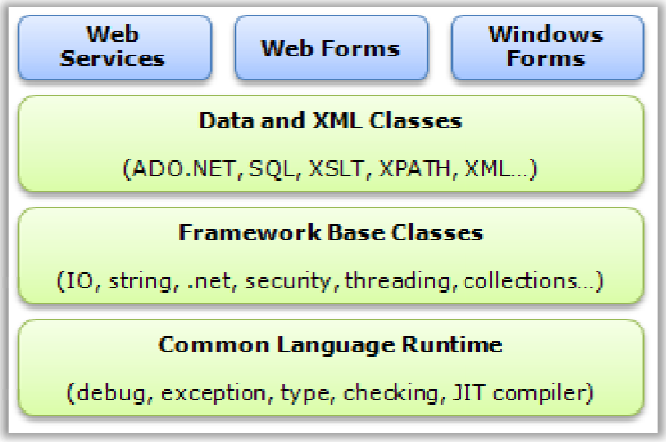
The Microsoft .NET Platform consists of five main components as shown in the figure. At the lowest layer, you have the Operating system which could include a variety of Windows platforms.

On top of the OS, we have a collection of specialized server products that shortens the time required to develop large scale business systems such as Biz Talk Server, Commerce Server, Application Centre, SQL Server etc. Since Web services are highly reusable, a number of building-block services are provided which developers can use for a fee. These services include the .NET Passport and the .NET Alert services.

The top layer consists of a development tool called the Visual Studio.NET (VS.NET) which helps in rapid deployment of web services and applications. VS.NET is an Integrated Development Environment (IDE) which supports four different languages.

The .NET framework is a development infrastructure which includes the CLR and a common framework of classes that may be used by all .NET languages.

Components of the .NET framework



Remember, this framework sits on top of the operating system. That is, the .NET framework is essentially a system application which runs on Windows.

1. The **Common Language Runtime (CLR)** is the most important component of the framework. It activates objects, performs security checks, lays the objects in memory, executes them, helps in debugging, handling exception and has a **Just In Time Compiler (JIT)** which uses metadata to compile Intermediate Language code. The CLR supports any language that can be represented in its **Common Intermediate Language (CIL)**.

2. The framework Base classes support basic input and output functionalities, string manipulation, security management, network communication as well as other functions.
3. The DATA and XML Class support data management and XML manipulation. It also allows you to manipulate XML data and perform XML searching and XML transactions.
4. Web Services, Web Forms and the Windows Forms are three different technologies which extend the DATA and XML classes. Web services include classes which support the development of distributed components. Web Forms is the key technology behind ASP.NET and allows you to rapidly develop Web GUI applications. Windows Forms help you to develop native Windows GUI applications.

ASP.NET

ASP.NET is a Web development framework which helps you build Web applications with very little coding. It is a server side scripting technology which is used for generating Web pages by request. The pages render real time data which is created just before being sent to the client browser. So you can build online shops, auction sites, bulletin boards etc using ASP.NET.

ASP.NET simplifies web page development with form-based programming. These forms are called Web Forms. While programming these forms, you can access classes of the .NET Framework and you can code your applications in any language which is compatible with the common language runtime (CLR) such as Visual Basic and C#.

The Web pages created using ASP.NET are completely object-oriented. These pages are compiled into an intermediate language by a .NET CLR compliant compiler. Then a Just In Time (JIT) compiler turns the intermediate code to native machine code which is eventually run on the processor.

The ASP.NET page framework presents a unified model for responding to client events that run on the server. The framework also maintains the State of the page and the controls on the page during the Page Processing Life Cycle. **State management** refers to the process by which a server maintains page information over multiple requests for the same or different pages.

Life cycle of a web page

While using *simple ASP programming*, the Web page starts its life when a client requests a particular page. The IIS parses this, does all initialization and runs the scripts on the ASP page to render HTML content to the client. Once rendering is complete, the page's life ends. If you have forms that pass some more data (from the

client) back to the ASP page (on the server) to be processed, a New request is run and the same process repeats. Passing data back to the original page for processing is known as **Postback.**

Web page created with ASP.NET

While using ***ASP.NET*** a slight modification takes place which has a huge impact on speeding up the application. Here also, the Web page starts its life when the client requests a particular page. The life cycle of the ASP.NET page includes initialization, instantiating controls, restoring and maintaining state, running event handler code, and rendering.



1. **Initialization:** The first event that happens in the life of a Web Form is the **Init** event. This is raised so that we can have initialization code ready for the page. At this time a master page and themes may be applied. Every page has an IsPostBack property which indicates if the page request is an original request or a postback request from the user. If PostBack is true, page initialization is not done.
   This is the place where a major difference occurs between ASP programming and ASP.NET programming. Imagine that you sent in a form from your client machine with 25 fields filled in to the server. Assume that 2 of the fields have to be resent. With ASP.NET programming and the IsPostBack property, you will resend only 2 fields to the server. Whereas, with ASP programming, the browser will have to send all 25 fields again.
2. **Instantiating controls:** The next event is the Load event in which all child controls of the Web Form are loaded and accessible. Thus, you will be able to retrieve data and populate the controls so that they may render themselves on a Web page when they are sent back to the client.
3. **Restoring and Maintaining State:** During load, if the current request is a postback, control properties are loaded with information recovered from **view state and control state**
4. **Running Event Handler code:** User interactions with the page such as a ButtonClick are handled through postbacks. If the request is a postback, and there are user initiated events, event handlers are called.
5. **Rendering:** Before rendering, the view state is saved for the page and all controls. The page calls a Render method for each control.

Now, take a deeper look at State Management which forms a very important aspect of ASP.NET technology.

State management in ASP.NET

State management refers to a number of client-side and server-side options which help to preserve data on a per-page as well as an application wide basis.

On the client-side are the view state, control state, hidden fields and cookies options for managing the state of data.

On the server side are the application state, session state, profile properties and database support options for managing the state.

Client side state management options:

a. **View state:** The view state property gives us a structure for saving values between multiple requests for the same page. This property is used when storing small amounts of information for a page which will post back to itself. When the page is processed, the state of the page and the controls is hashed into a string and saved inside the page as a hidden field. When this page is posted back to the server, the view-state string is parsed at page Initialization and restores property information in the page.
b. **Control state:** This is used when storing small amounts of state information about a control. The Control state property allows you to *save* the property information of a specific control.

Server Side State Management

a. **Application State:** Application State is used for storing global information which is not changed frequently and which is used by many users where security is not an issue. ASP.NET provides the application state through the HttpApplicationState class as a method to store global application specific information which is visible to the entire application.
b. **Session State:** This is used when storing information which is specific to a session where security is of importance. ASP.NET uses the HttpSessionState class to store session specific information which is visible only inside the session.

Both application state information and session state information are managed by the server.

EXERCISE

Perform the following activities till you understand the basics of Web Applications

S.No.	Activities
1.	Discuss the process involved while you try to book an Air ticket using MakeMyTrip, online shopping using ebay & flipkart.

ASSESSMENT

Answer the following questions:

1. Explain the concept of a client server Model.
2. Give a few examples of where you will use Client –Side Scripting.
3. Explain what you understand by the term Event Handler. Specify a few events that may be occur while you fill in a form for IRCTC.
4. What is an Event Model?
5. Explain how the page life cycle differs in ASP and ASP.NET
6. Specify three .NET enterprise servers and specify what their main purpose is
7. Explain what you understand by "Postback".
8. What do you understand by the term State Management in ASP.NET?

Fill In The Blanks:

1. The _____ has a computer program which runs continuously listening for connections from _____.
2. When requesting for a Web page, the browser will use the _____ method and while sending data to be processed to the server, it uses the _____ method.
3. Client-side scripting represents all code that is executed in the browser _____ the server sends the page back to the user.
4. Server-side scripting refers to all code that is executed by the web server _____ the web page is sent to the user's computer.
5. Checking the data that a user has entered into a form on a Web Page is a common usage of _____ scripting.
6. _____refers to the process by which a server maintains page information over multiple requests for the same or different pages.
7. ASP.NET uses the _____ class to store session specific information which is visible only inside the session.
8. The HttpApplicationState class _____ information which is visible to the entire application.
9. _____, _____ and _____ are three different technologies which extend the DATA and XML classes in the .NET framework.
10. The life cycle of the ASP.NET page includes _____, _____,_____, and _____.
11. Acronym for JIT: _____.

SESSION 26: VISUAL WEB DEVELOPER EXPRESS

Lesson Objectives:

At the end of this session, you will be able to

- Create a Web page using Visual Web Developer Express.
- Create a Web Application using Visual Web Developer Express.

RELEVANT KNOWLEDGE

You have learnt to use HTML, CSS and Expression Web previously; it is recommended that you recap these modules before proceeding further.

Note: Download and Install Microsoft Visual Web Developer 2010 Express before proceeding further.

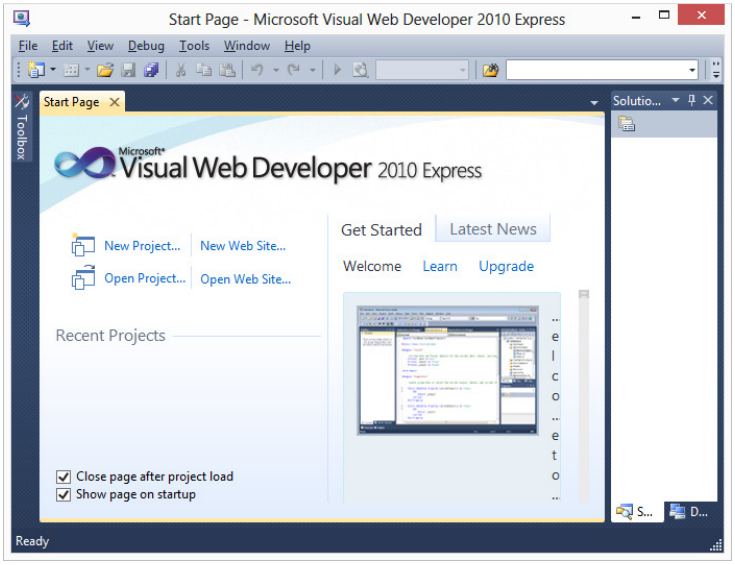
Important: This module focuses on fundamental concepts of web development and web application. Only a high-level overview is provided here; use product help files and/or online resources to learn more.

Launching Visual Web Developer 2010 Express Edition

Once the installation is complete, launch the program by following the procedure:

1. Click **Start > Programs > Microsoft Web Developer 2010 Express**.

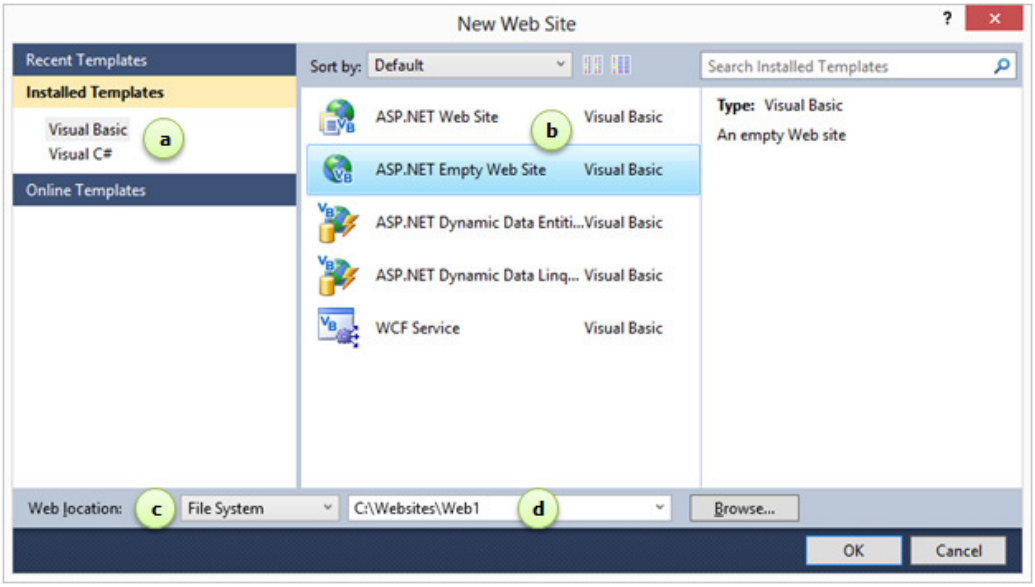
Note: It may take a while to load for the first time.



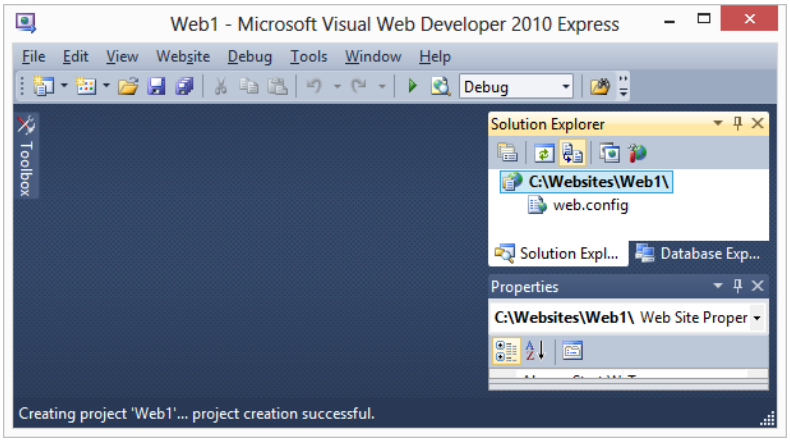
Creating Websites (Static)

You can create web pages using Visual web developer express; procedure is very similar to that of Microsoft Expression Web.

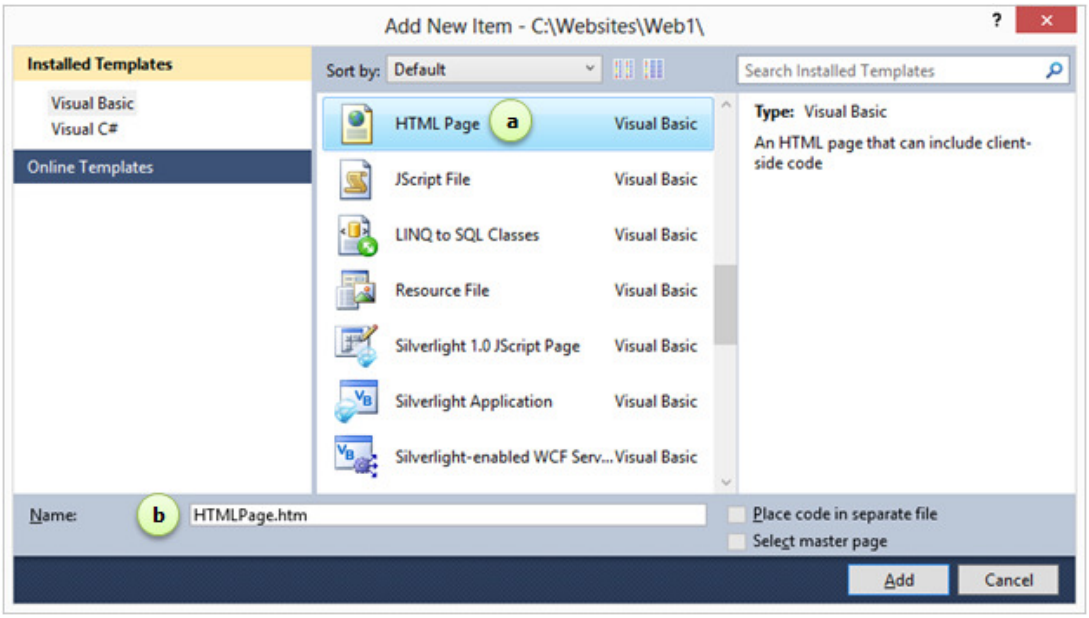
1. Select **File > New Website…. New Web Site** dialog box appears (figure below).



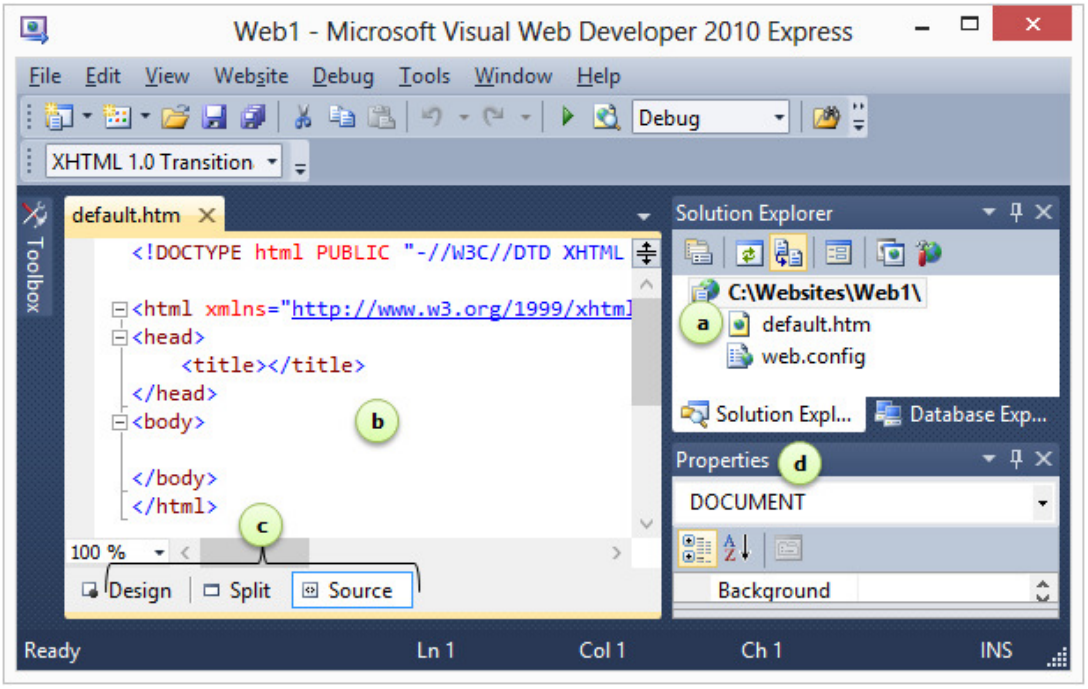
   a. You need to choose a programming language (not required for normal websites that will make use of HTML and CSS). Leave the default selection.
   b. You can create database-driven websites; however, this requires programming. Select **ASP.NET Empty Web Site** from the list available.
   c. You can either choose to use HTTP (directly to a web server), FTP (directly to a web server using FTP) or File System (local computer). Select **File System** as you can work with the website on the local computer and publish it later to a web server.
   d. Choose a location on your local hard disk drive, for example **C:\Websites\Web1**. Click **OK**. Notice an empty website created (figure below).



2. Now you may add HTML, CSS, JavaScript, etc. files to the website. To add a HTML file, select **File > New File…**. Add New Item dialog box appears (Figure below).



   a. Scroll and select **HTML page.**
   b. Type a file name in **Name:**, for example default.htm. Click **Add**.
3. Observe an HTML file added to this website (figure below).

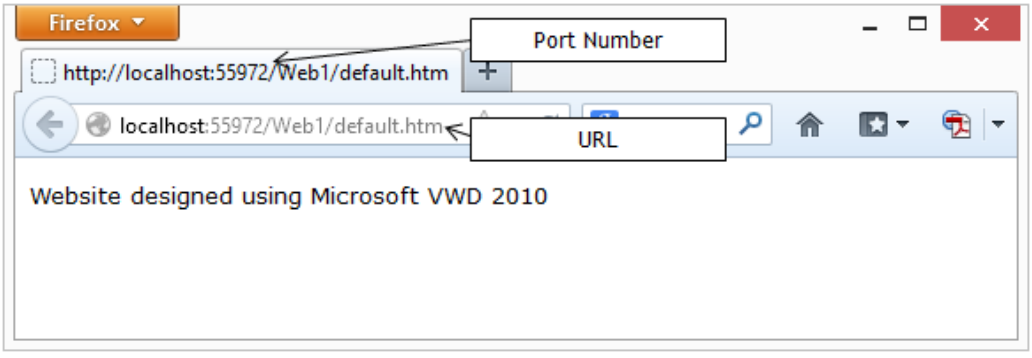


a. List of files (HTML, CSS, JavaScript, Images, etc.) for this website.
b. Coding Area for inserting code manually.
c. Switch between Design, Code and Split views (looks familiar to expression web, isn't it?).
d. Properties window for setting properties (similar to MEW).

4. Now switch to **Design View** and insert some text (similar to MEW).
5. Save the file.

Microsoft Visual Web Developer Express includes a "mini" web server (referred to as "development server") that can be used for testing web pages; this is useful in situations when you want to test a website before uploading to a remote web server.

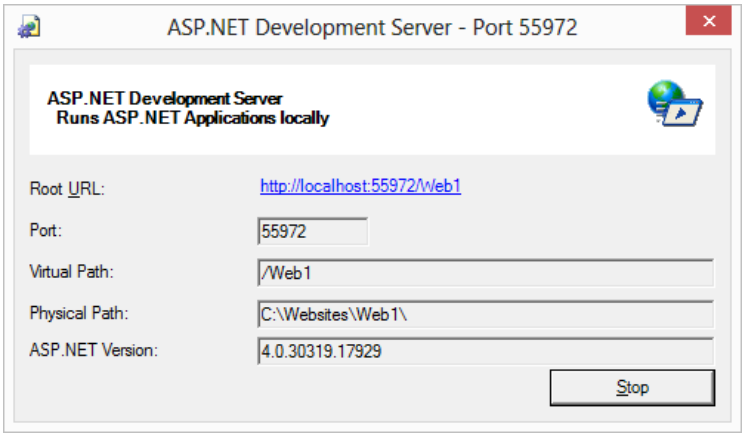
6. To view this website in a web browser, Press **CTRL+F5**. Observe the results displayed in the web browser (Sample below).



7. When you run a website by pressing **CTRL+F5**, Development Server runs in the background and appears in the system tray (figure below, left). Double-click

the ASP.NET Development Server icon in the system tray; a window appears similar to the one below (figure below, right).





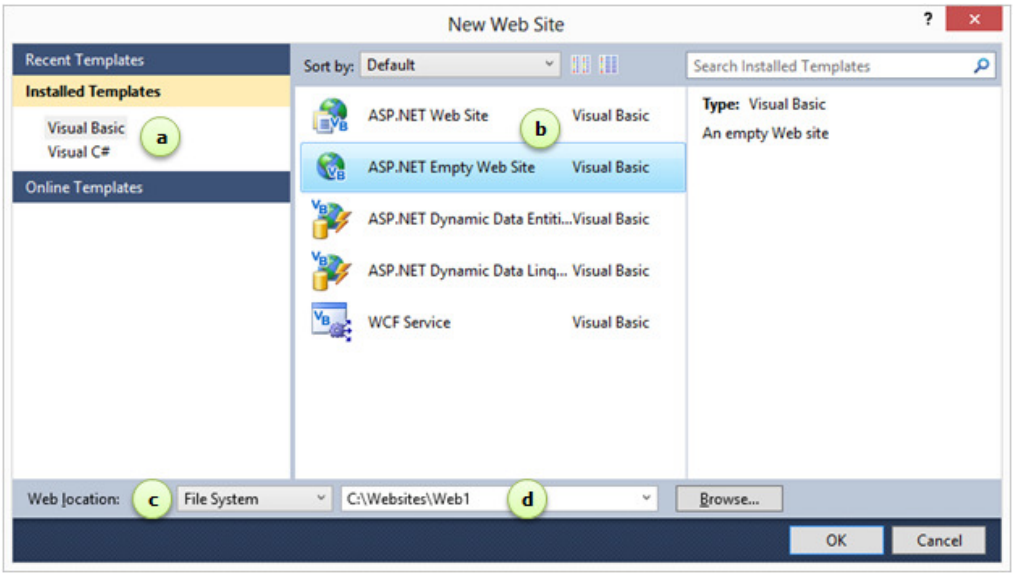
8. Notice the port number in **Port:** and the URL in **Root URL:**; isn't it the same that is displayed in the address bar of the web browser?
9. Click **Stop** to stop the development web server.

The Development Server built-in with Visual Web Developer Express is designed for processing server-side scripting code before the results are sent to a web browser, especially, pages with ASP.NET code needs to be processed before it is sent to a web browser.

Creating Web Applications

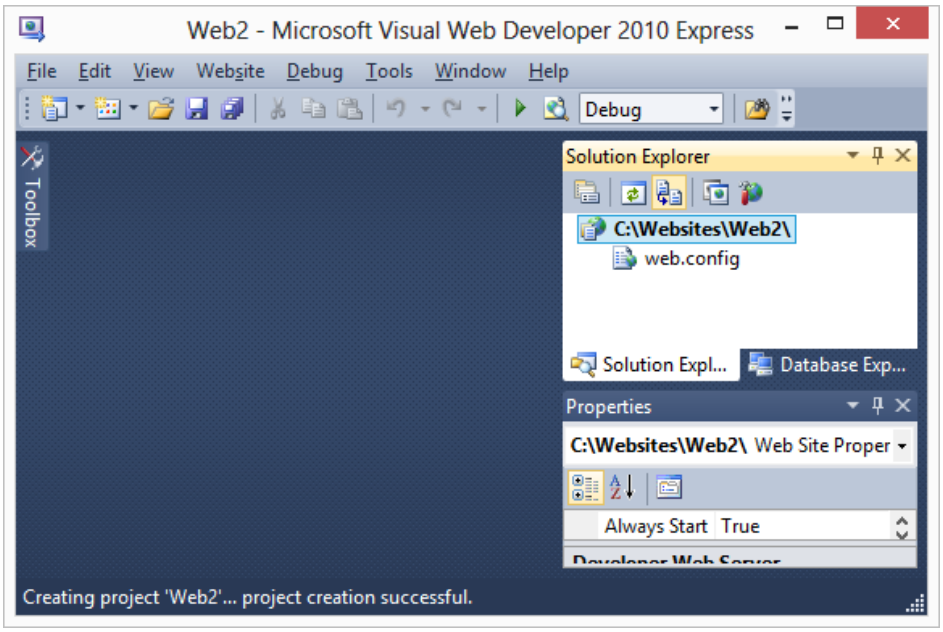
You can create web applications using **Visual Web Developer.**

1. Select **File > New Website…. New Web Site** dialog box appears (figure below).



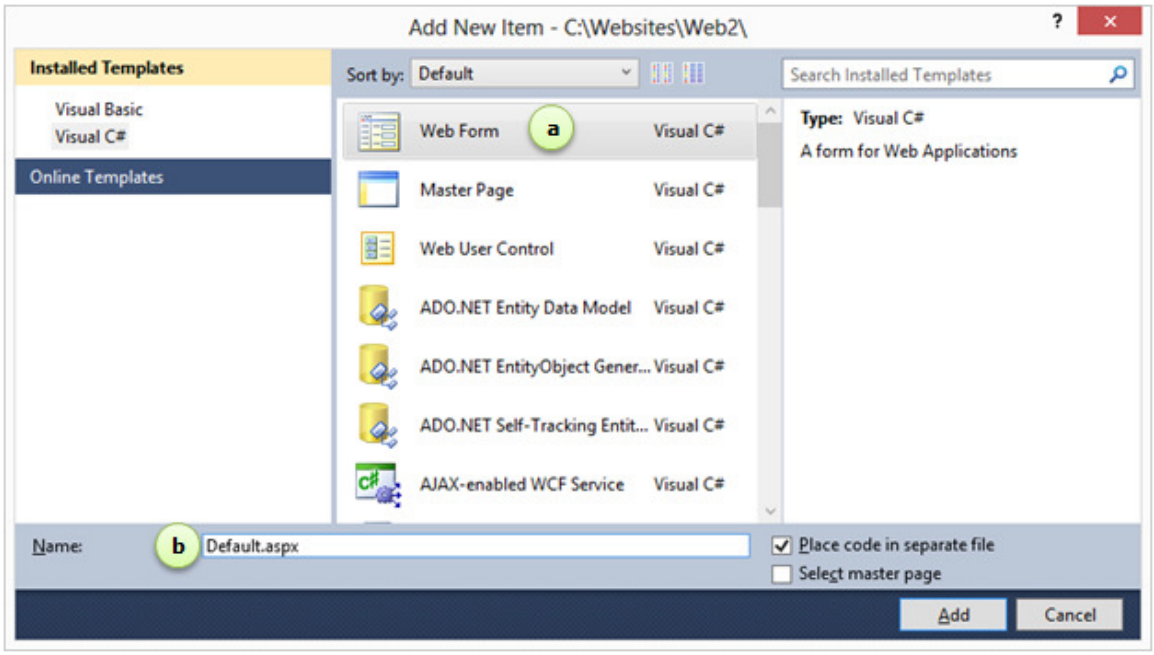
a. Select **Visual C#** under Installed **Templates**. You can use a language of your choice, either Visual Basic or Visual C#. Since you have been learning Visual C#, select **Visual C#.**
b. Select **ASP.NET Empty Web Site**. You can select from different types of ASP.NET web applications; to create an empty site as a starting point, select **ASP.NET Empty Web Site.**
c. Select **File System from Web location:** dropdown list. You can either choose to use HTTP (directly to a web server), FTP (directly to a web server using FTP) or File System (local computer). Choose File System as you can work with the website on the local computer and publish it later to a web server.
d. Save this website in a different location, for example: **C:\Websites\Web2**.

2. Click **OK**. Notice a website is created and displayed (figure below).



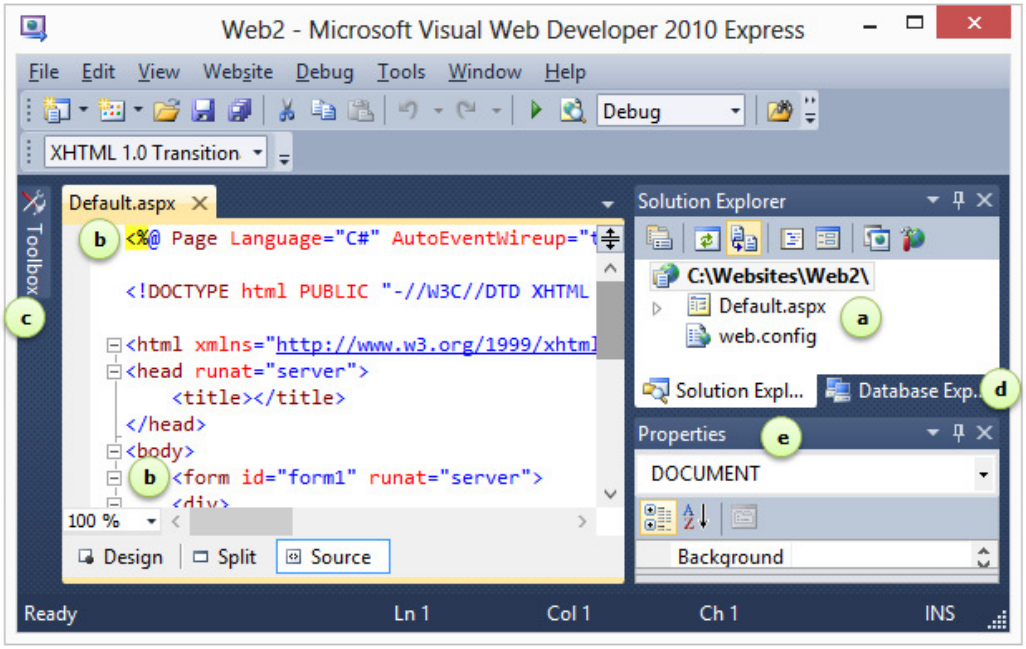
Since this is a ASP.NET website, you may notice an additional file "web.config" included automatically. Web.config is the main configuration file for ASP.NET applications; it contains information that controls module loading, security configuration, session state configuration, database connection strings, application language and compilation settings.

3. You can add HTML, Style Sheets, ASP.NET pages, etc. to this website. If you want to create a web application, you must use the ASPX format which configures the web page to a dynamic web page. To add a dynamic web page, select **File > New File…**. A **Add New Item** dialog box appears (figure below).



Notice the different items in this list. To create a web page that needs to be processed by the web server, select **Web Form** and click **Add**. Notice a web form added to this website (Figure below).

Note: ASP.NET web pages have the file extension **.ASPX**.

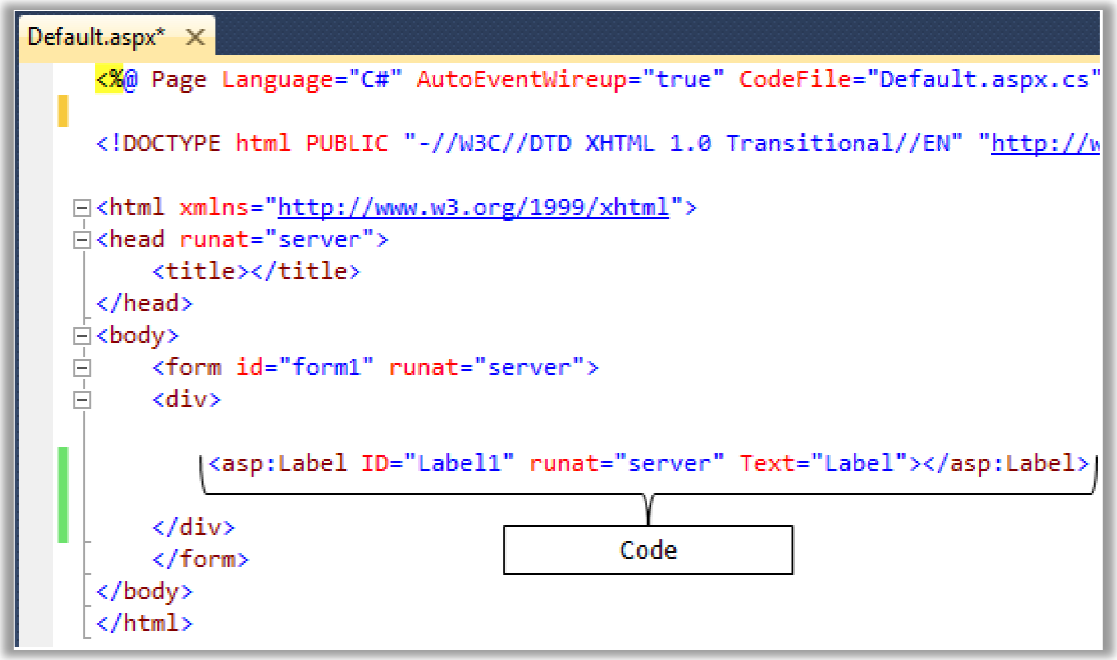


a. **Solution Explorer** refers to files and resources within this website.
b. **ASP** related code embedded in web page.
c. **Toolbox** contains controls that can be used in a website.

d. **Database Explorer** refers to database related resources used in a website.
e. **Properties** window.

A Simple Program

1. Open **Default.aspx**.
2. Switch to **Design View**.
3. Move the mouse cursor over **toolbox**.
4. Drag and drop **Label** control into the web page.
5. Switch to **Code View**. Observe the code included (figure below).



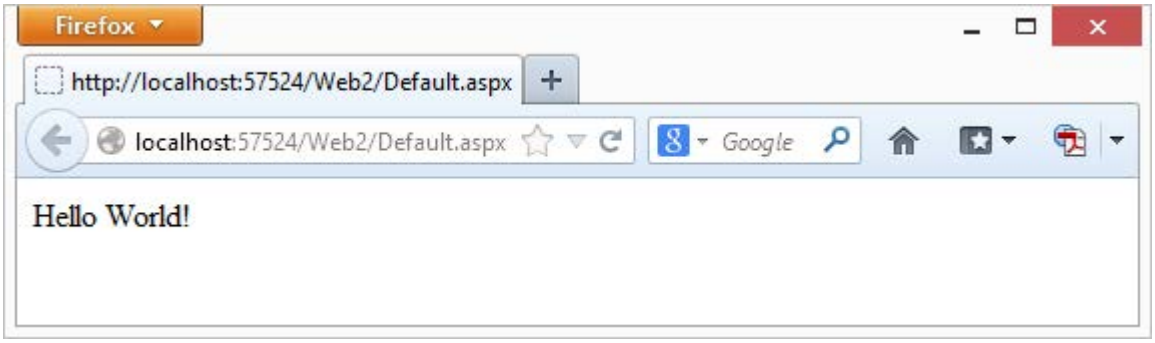
6. Now type the following code anywhere within the page (Remember, web server will look for ASP code anywhere within this page to execute) (Sample below.

```
<% Label1.Text = "Hello World!"; %>
```

```
<form id="form1" runat="server">
<div>
<% Label1.Text = "Hello World!"; %>
    <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>

</div>
</form>
```

7. Now press **CTRL+F5**. Observe the results displayed in the web browser (figure below).



Adding Images into the Project

You can include images from your local computer using the **IMG SRC** element. To add an image, copy the image to the project folder within Visual Web Developer Express. Drag and drop the image to a web page that is already open. Switch to Code View and observe the code included. Press **CTRL+F5** and observe the results displayed in the web browser.

You can create really professional Web applications with very little code by using the various controls in the Toolbox. For details, visit the following websites:

- http://msdn.microsoft.com/en-US/library/w9ss7h1a%28v=vs.80%29.aspx
- http://msdn.microsoft.com/en-us/library/x8k61whf%28v=vs.80%29.aspx

EXERCISE

Perform the following activities till you understand the basics of creating Web Pages and Web applications

S.No.	Activities
1.	Assume that you are a Computer Products Dealer and you wish to create a Web Application to showcase your products. Discuss what controls you will use to create the content of your Web Page & how you will make it look good and appealing to the user. Create a Web page to showcase the same.

SESSION 27: WEB HOSTING AND WEB SERVICES

Lesson Objectives:

At the end of this session, you will be able to:

- Understand the concept of Web hosting.
- Understand the concept of Web Services.

RELEVANT KNOWLEDGE

You have learnt about web hosting, ISP's, etc. in the previous sessions. Given below is a recap:

- A **Web Hosting Service** allows individuals and organizations to make their website accessible to the public. Organizations that provide resources such as disk space, bandwidth, etc. are referred to as "Web Hosts" or "Web Hosting Providers". Web hosts usually keep their infrastructure in a placed commonly referred to as a "Data Center". Most web hosting providers also allow you to keep your server in their premises (referred to as Co-location) usually for high-availability and bandwidth.
- An **Internet Service Provider (ISP)** is a company that offers you access to the Internet using data transmission technology such as dial-up, DSL, cable modem or dedicated high-speed interconnects. It generally provides space on a server, email service, maintenance and support & security.

Most basic type of Web Hosting Service involves the Web Page and small-scale file hosting. In file hosting, files are uploaded to the Web on an 'as is' basis with minimal processing, using the **File Transfer Protocol (FTP)** or a Web Interface. Single page hosting is usually sufficient for Personal web pages and Personal Web Site hosting is typically free. A large number of Internet Service Providers (ISP) offers this as a free service to their subscribers.

A business site may be more complex and may need a comprehensive package which gives database support and application development platforms such as Java, PHP, ASP.NET, ColdFusion etc. Using these, the customer will be able to write or install scripts for applications such as Forums and Content Management.

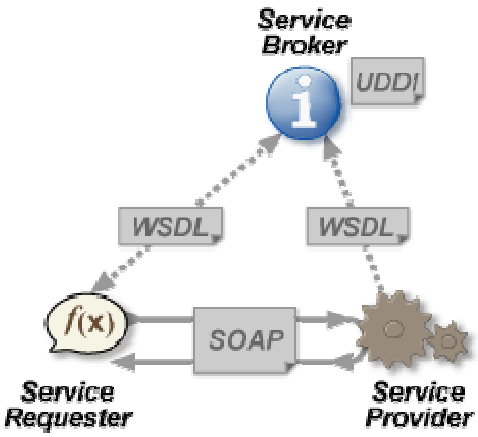
E-Commerce makes use of **Secure Socket Layers (SSL).** So we see that the Business web site hosting often has a higher expense depending upon the size and type of the website.

- **Internet Information Services (IIS)** is a suite of product that has HTTP, FTP, etc. servers included as a part of the Microsoft Operating System. Organizations

that prefer to keep their hosting private can use IIS; you can create web sites, virtual directories, etc. and manage everything from within your own premises.

- A **Site or Web Site** refers to a separate domain (for example, www.example.org) hosted on single or multiple computer. Multiple web sites may also be possible on a single computer depending on the hardware & network resources and the ability of a web server. For example, you can host only a single website on client operating systems such as Microsoft Windows XP; but you can host unlimited number of websites on server operating systems such as Windows 2003 or Windows 2008.
- A **Virtual Directory** is a folder that may point to a different folder on the same computer or to a folder another computer. Virtual directories are used in large complex web sites where each part of a website should be managed by a different person or team. For example, you may have a website called **www.example.org**; in this case, an administrator can create a virtual directory under this domain, for example **www.example.org/help** and the **help** content can be published and managed on a different computer. However, this URL appears a part of a website for the end user. This can help in improving performance as the content is actually isolated from the main web server.

- A **Web Service** is a way of communication between two electronic devices across the World Wide Web. Usually applications are locally installed on a computer and accessed; this requires the application to be available on the local computer and if in case, the application or computer on which the application is installed is not working or not available, it has a negative impact on the business. Recent trend includes using applications over the Internet (referred to as "Software as a Service or SaaS") where users can use the application using any device such as mobile phones, smart phones or netbooks from virtually anywhere around the globe. Also charges are comparatively less making it affordable for anyone to use the application. These collectively are referred to as the "Web Service".



A Web Service consists of distributed software components available over the web/cloud and accessible through Web protocols. It has an interface described in a machine-readable format called **WDSL**.

Web Services Description Language (WSDL) is an interface description language based on XML which describes the functionality offered by a Web Service. The WSDL specifies how the service is to be called, the parameters that are expected and the type of data structure that will be returned. WSDL uses the **SOAP** protocol to pass messages between clients and servers.

Simple Object Access Protocol (SOAP) provides a basic messaging framework using XML upon which web services can be built. It is a specification for exchanging structured information in the implementation of Web Services using XML Information Set for its message format and HTTP and SMTP for message negotiation and transmission.

SOAP protocol provides a basic Messaging framework consists of three parts:

1. an envelope, which specifies what is in the message and how to process it.
2. a set of encoding rules for expressing instances of application-defined datatypes.
3. a convention for representing procedure calls and responses.

SOAP has three major characteristics:

1. **Extensibility** (security and WS-routing),
2. **Neutrality** (across any transport protocol such as HTTP, SMTP, TCP, etc.).
3. **Independence** (allowing for any programming model).

There are a large number of SOAP services available. Bing (searches), stock quotes, traffic conditions and weather are a few of them.

EXERCISE

Perform the following activities till you understand the concept of Web Services

S. No.	Activities
1.	Assume that you want to create a simple Web Site to showcase your talents on the Web. Discuss and specify the steps that you need to take to make this a possibility.
2.	Use the following articles for additional reading: • https://en.wikipedia.org/wiki/Virtual_directory • http://support.microsoft.com/kb/172138 • http://technet.microsoft.com/en-

	us/library/cc772350%28v=ws.10%29.aspx • http://support.microsoft.com/kb/323972 • http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/b77cf015-017f-489c-9b5b-65ca4a679392.mspx?mfr=true • http://www.youtube.com/watch?v=8SGL5BoMvmM

ASSESSMENT

Answer the following questions:

1. Explain the purpose of web hosting.
2. Explain Virtual Directory (IIS).
3. Explain what you understand by a Web Service.
4. Explain what you understand by SOAP.

Fill in the blanks:

1. Companies that provide space on a server to be owned or leased to clients as well as Internet connectivity in a data center are called _____.
2. The three major characteristics of SOAP are _____, _____ and _____.

ADDITIONAL RESOURCES

If you want to learn more about developing Windows or Web applications, you may use "Starter Kits". "Starter Kits" are complete applications, available free for download. To use starter kits, do the following:

1. Go to http://www.asp.net/web-forms/open-source.
2. Browse, select and download a starter kit.
3. Refer to instructions for each starter kit on the website.

Using a starter kit (WINDOWS APPLICATION)

1. Download **Teacher Starter kit** from http://msdn.microsoft.com/en-us/beginner/aa700775.aspx.
2. Go to the downloaded location and double-click **TeacherStarterKit(Csharp).vsi**. Follow the on-screen instructions and complete the installation (ideally they are extracted into **C:\Users\USERNAME\Documents\Visual Studio 2010\Templates\ProjectTemplates\Visual C# folder**).
3. Open **Microsoft Visual C# 2010 Express**.
4. Select **File > Open Project…. Browse** and locate the project file.
5. Press **CTRL+F5** to run the project!

Using a starter kit (WEB APPLICATION)

1. Download **Employee Info Starter Kit** from http://code.msdn.microsoft.com/Employee-Info-Starter-Kit-2d386ba7.
2. Most of them are compressed files, extract them into a folder.
3. Open **Microsoft Visual Web Developer Express**.
4. Select **File > Open Project….** Browse and locate the project file.
5. Press **CTRL+F5** to run the project!

Note:

a. Some of the samples may be developed using earlier or recent versions of express editions. For example, if you download a Starter kit designed for 2008 express edition, it may be converted to 2010 edition when you open the project. Some code may need to updated manually for functionality.
b. Starter kits are usually available in two programming languages, C# and/or VB. Download appropriate versions before experimenting with it.
c. Visit websites such as www.sourceforge.net for open source applications.
d. Always read the instructions before you work with a starter kit; these may have specific instructions, last minute updates, etc.

e. If necessary, download the previous versions of the express editions (Google for link) if you want to run older samples.
f. Once you are comfortable with a particular edition (like 2010 express), you can download recent version of the express editions (currently 2012) for practice.

Additional Links

- http://www.microsoft.com/web/gallery/
- http://msdn.microsoft.com/en-us/library/vstudio/dfcw7sd5%28v=vs.100%29.aspx
- http://www.codeplex.com/
- http://msdn.microsoft.com/en-us/beginner/aa700775.aspx
- http://msdn.microsoft.com/en-us/beginner/bb308740.aspx
- http://msdn.microsoft.com/en-us/beginner/bb308743.aspx
- http://msdn.microsoft.com/en-us/beginner/bb308747.aspx
- http://msdn.microsoft.com/en-us/beginner/bb308749.aspx
- http://msdn.microsoft.com/en-us/beginner/bb308770.aspx
- http://msdn.microsoft.com/en-us/beginner/bb308786.aspx
- http://msdn.microsoft.com/en-us/beginner/bb308809.aspx
- http://msdn.microsoft.com/en-us/beginner/bb308817.aspx
- http://msdn.microsoft.com/en-us/beginner/bb308818.aspx
- http://msdn.microsoft.com/en-us/beginner/bb308825.aspx
- http://msdn.microsoft.com/en-us/beginner/bb308861.aspx
- http://msdn.microsoft.com/en-us/beginner/bb308891.aspx
- http://msdn.microsoft.com/en-us/beginner/ff715351.aspx
- http://msdn.microsoft.com/en-us/library/32dbftby.aspx
- http://msdn.microsoft.com/en-us/library/5b13a7k4.aspx
- http://msdn.microsoft.com/en-us/library/8y82wx12.aspx
- http://msdn.microsoft.com/en-us/library/aa288453.aspx
- http://msdn.microsoft.com/en-us/library/aa480728.aspx
- http://msdn.microsoft.com/en-us/library/aa984771%28VS.71%29.aspx
- http://msdn.microsoft.com/en-us/library/asz1fz8b.aspx
- http://msdn.microsoft.com/en-us/library/bb330916.aspx
- http://msdn.microsoft.com/en-us/library/bb330932.aspx
- http://msdn.microsoft.com/en-us/library/d56de412.aspx
- http://msdn.microsoft.com/en-us/library/dd409393%28VS.100%29.aspx
- http://msdn.microsoft.com/en-us/library/fda2bad5%28VS.100%29.aspx
- http://msdn.microsoft.com/en-us/library/ms173104.aspx
- http://msdn.microsoft.com/en-us/library/ms173109.aspx
- http://msdn.microsoft.com/en-us/library/ms173121.aspx

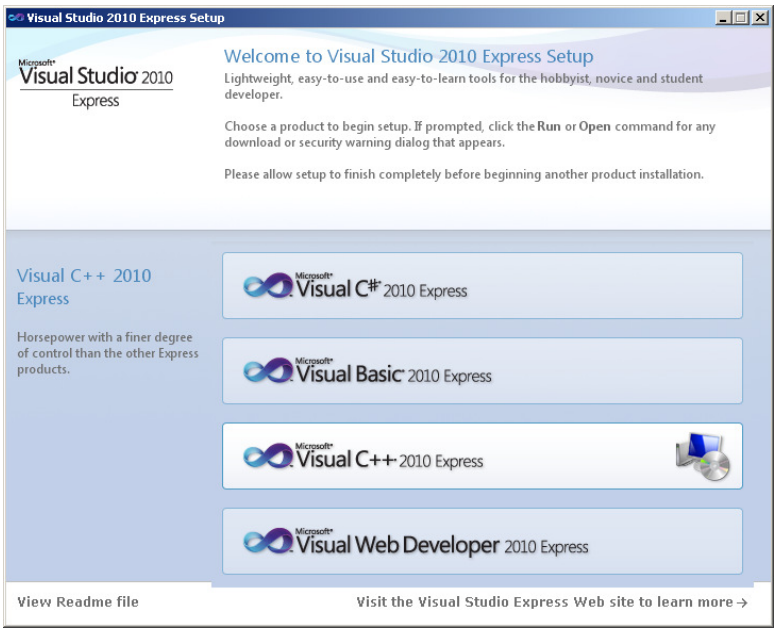
- http://msdn.microsoft.com/en-us/library/ms173149.aspx
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- http://msdn.microsoft.com/en-us/library/x9afc042.aspx
- http://msdn.microsoft.com/en-us/library/x9fsa0sw.aspx
- http://msdn.microsoft.com/en-us/library/zt39148a.aspx
- http://msdn.microsoft.com/en-us/vcsharp/aa336800.aspx
- http://www.asp.net/sql-server/videos/designing-relational-database-tables
- http://www.w3schools.com/ado/default.asp
- http://www.w3schools.com/sql/default.asp
- http://www.iis.net
- http://msdn.microsoft.com/en-us/library/hh147278%28v=vs.88%29.aspx

APPENDIX

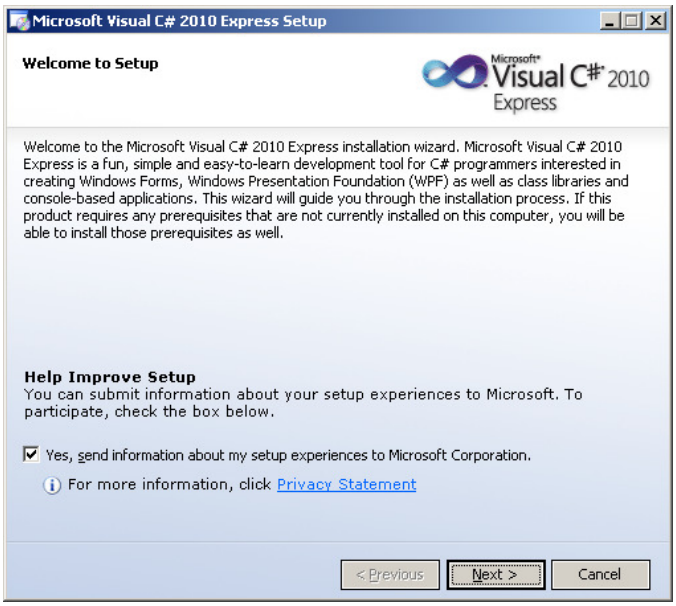
Download and Install Visual Studio 2010 Express Edition.

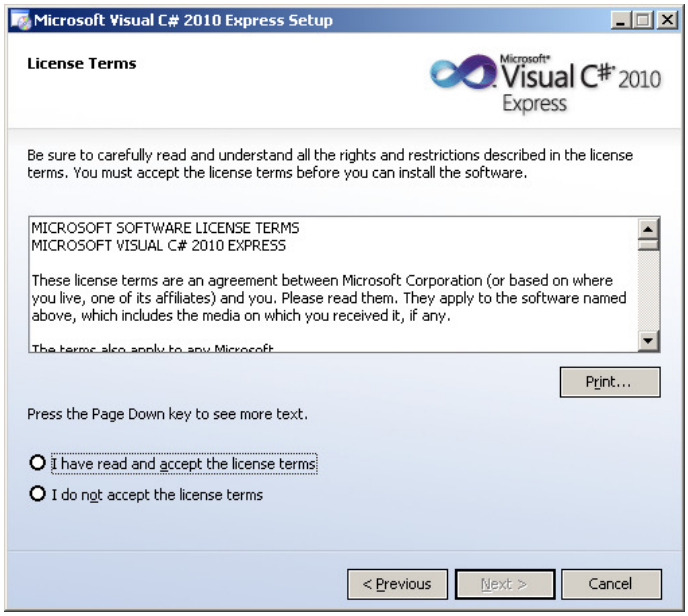
1. Download Visual Studio 2010 Express Edition from download.microsoft.com.

Note: When you download, select the Offline Installer version to save bandwidth when installing on multiple computers and for future installations.

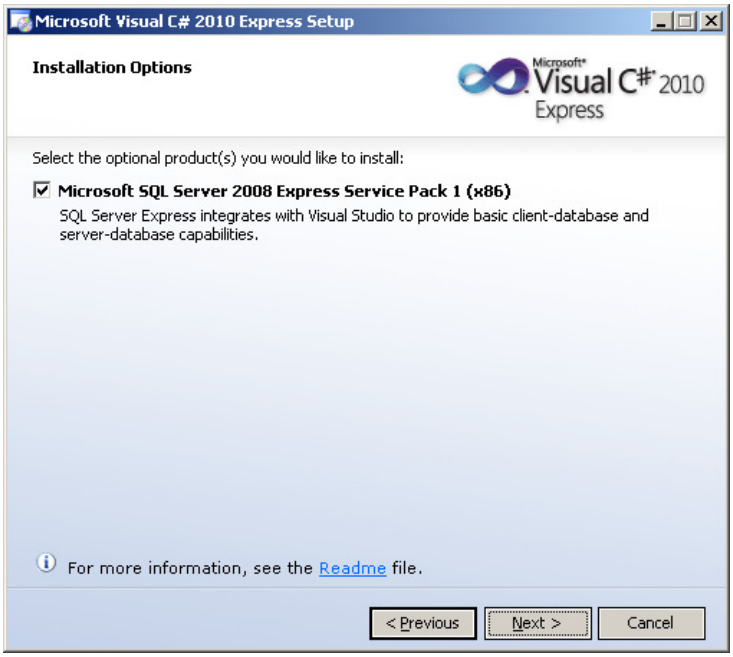


2. Burn it to DVD and insert the DVD on the computer where you want to install (if you are using Windows 8, just double-click the ISO file. It will automatically mount as a DVD).
3. Double-click **X:\Setup.exe** (Replace X: with drive letter assigned to DVD). **Visual Studio 2010 Express Setup** dialog box appears (Figure above).
4. Click **Visual C# 2010 Express**. **Welcome to Setup** dialog box appears (Figure adjacent).
5. Click **Next**. **License Terms** section appears (Figure below).

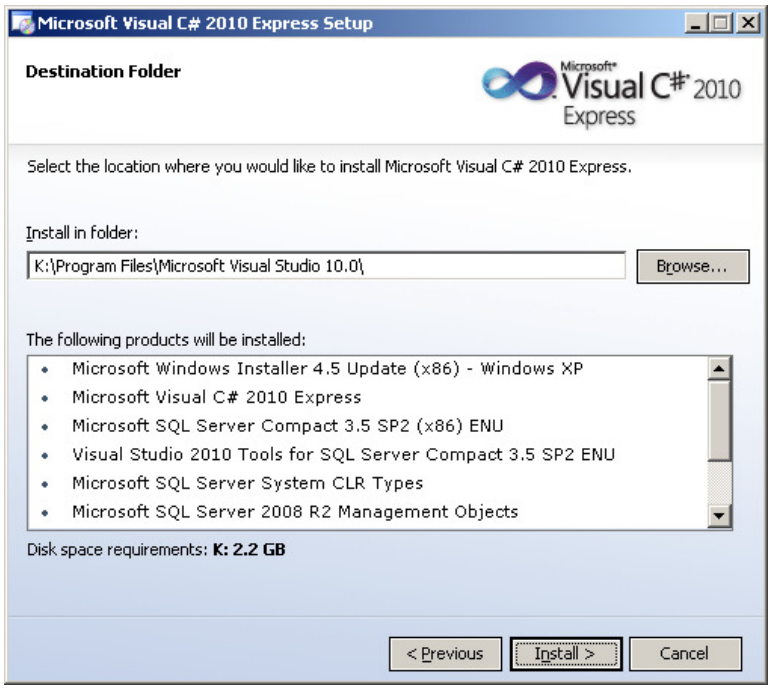




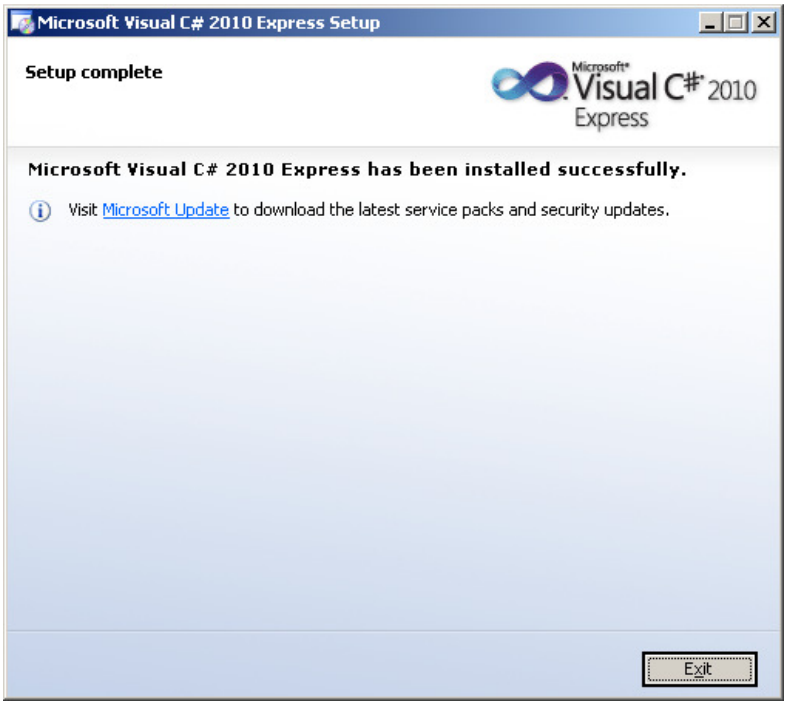
6. Select **I have read and accept the license terms** and click **Next**. **Installation options** section appears (Figure below).



7. Check **Microsoft SQL Server 2008 Express Edition (x86)** and click **Next**. **Destination Folder** section appears (Figure below). Click **Next**.



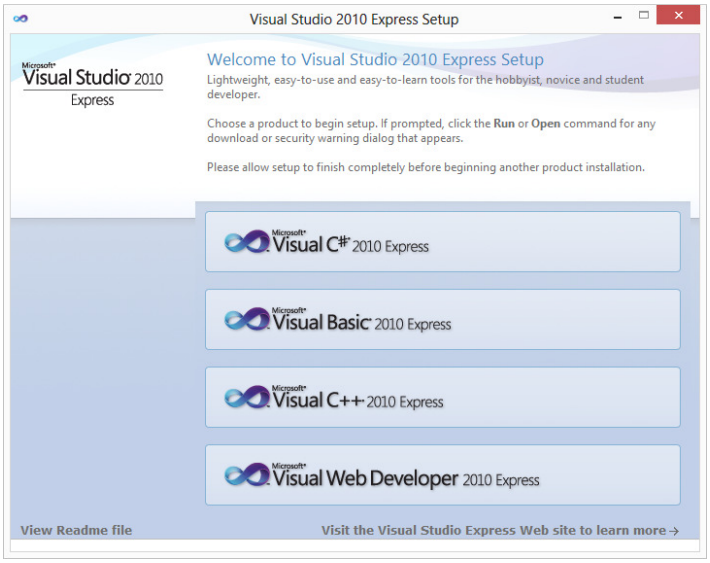
8. Click **Install >**. **Setup Complete** section appears (Figure below).



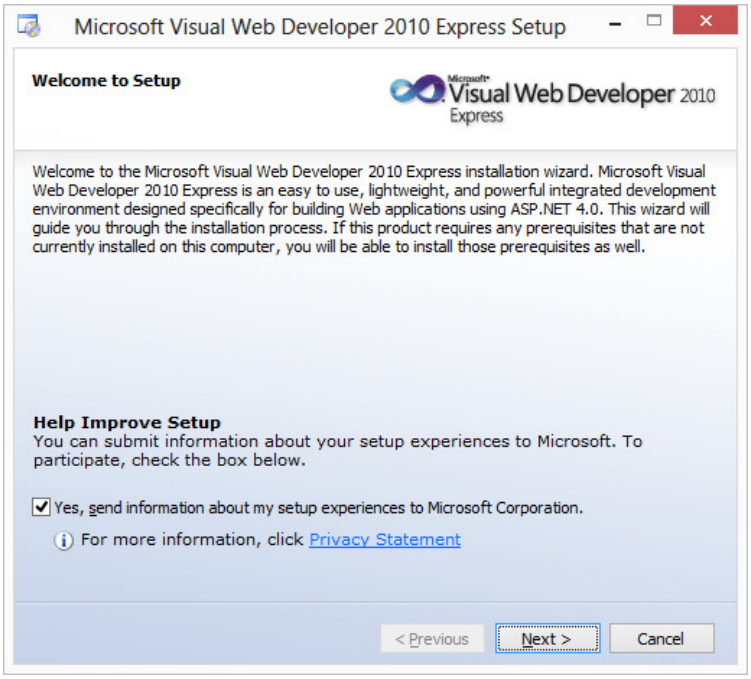
9. Click **Exit.**

Downloading and Installing Microsoft Visual Web Developer 2010 Express

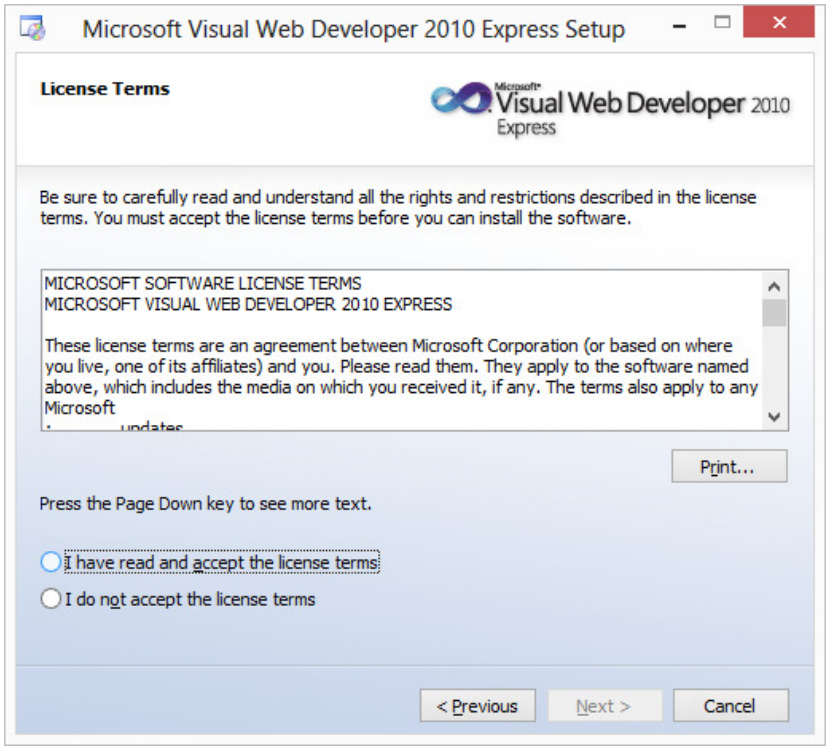
1. Download **Microsoft Visual Web Developer 2010 Express** from download.microsoft.com or Use the **Visual Studio 2010 Express Edition** offline installer downloaded earlier.
2. Insert the DVD and double-click **Setup.exe**. A dialog box appears similar to the one below.



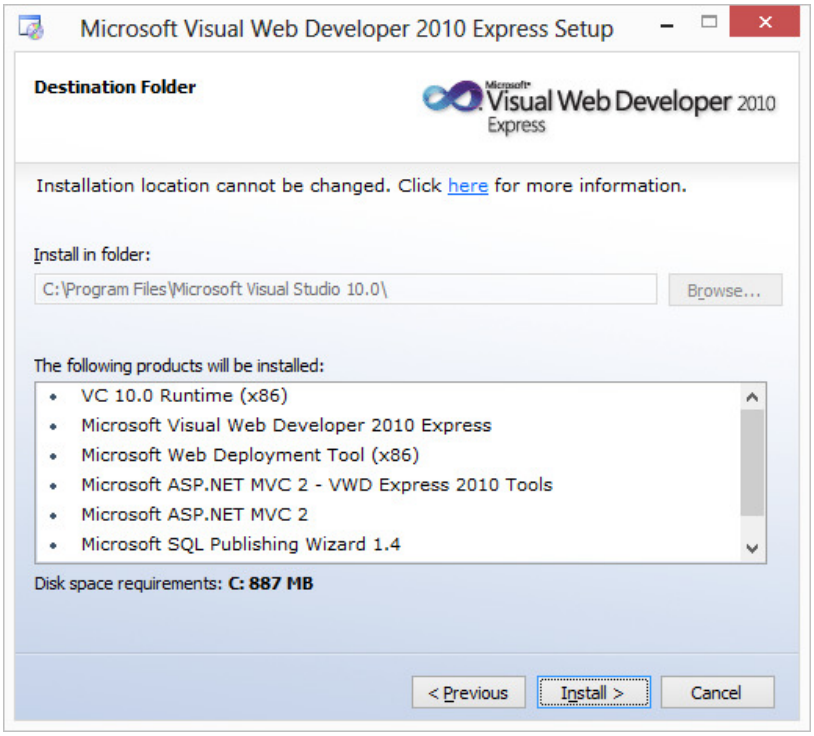
3. Click **Visual Web Developer 2010 Express**. **Welcome to Setup** dialog box appears (Figure below).



4. Click **Next**. **License Terms** section appears (Figure below).



5. Select **I have read and accept the license terms** and click **Next**. **Destination Folder** section appears (Figure below).



Click **Install** and click **Exit** once installation is complete.